THE
PRESIDIO TRUST

April 26, 2007

Mr. Robert M. Boggs, Jr. P.E.
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Subject: Transmittal: Revised Figures and Tables
Potential Chemicals of Concern (PCOCs) in Soil and
Proposed Phase 2 Sampling Locations
Bluff Top and Frontal Slope Areas
Baker Beach Disturbed Areas and Merchant Road Fill Site
Presidio of San Francisco, California

Dear Bob:

This letter transmits revised figures and tables presenting analytical results from the Phase 1 (December 2006) soil sampling program and summarizes the proposed Phase 2 investigation at the frontal slope and bluff top areas at Baker Beach Disturbed Areas 1, 1A, 2, 2A, (BBDAs) and the Merchant Road Fill Site (MRFS). The Phase 2 sampling program is designed to further characterize the extent of contaminants in soil on the bluff top and frontal slope areas at the BBDAs.

The revisions presented in this submittal reflect the changes agreed upon during a March 6, 2007, meeting between Robert Boggs Jr of the California Environmental Protection Agency Department of Toxic Substances Control (DTSC), George Ford of the Presidio Trust (Trust), Brian Ullensvang of the National Park Service (NPS), and Mary Jo Heassler and Bill Feller of MACTEC Engineering and Consulting, Inc (MACTEC). The revisions are as follows:

- Delete originally proposed Battery Frontal Slope Area perimeter soil borings BB1SB128, and BB2ASB121 through BB2ASB123. The DTSC, Trust, NPS, and MACTEC agreed that excavation confirmation sampling will adequately delineate the westernmost limit of polycyclic aromatic hydrocarbon (PAH) impacted soil west of Batteries Bouttelle and Godfrey.

- Delete originally proposed Battery Frontal Slope Area perimeter soil boring BB2ASB124. The frontal slope fill material from this area is no longer present. In addition, the DTSC, Trust, NPS, and MACTEC agreed that the area will be adequately delineated during excavation confirmation sampling associated with excavation of the BBDA 2 waste fill area immediately south of the proposed location of BB2ASB124. As a consequence of the proposed soil boring deletions, originally proposed soil boring locations BB1SB129, BB1SB130, BB2ASB125, and BB2ASB126 have been re-designated BB1SB128, BB1SB129, BB2ASB121, and BB2ASB122.

- Delete soil borings BB2SB115 through BB2SB124, originally proposed in the vicinity of the Former Metals Disposal Area and Salvage Shop. The DTSC, Trust, NPS, and MACTEC agreed that further characterization was not necessary because results of Phase 1 sampling adequately characterized the extent of impacted soil in this area.

The following cleanup levels were used to screen the data:

- **Protection of Human Health, Residential Use** – Although planned land use at the BBDAs is recreational, more stringent residential cleanup levels are used to evaluate site data.

- **Protection of Ecological Receptors, Special-Status Species** - Both rare and federally-listed species are known or have potential to occur in open space natural areas at the BBDAs. Accordingly, cleanup levels protective of special status species are considered applicable.

- **Metals Background Concentrations for Serpentinite Soils** – Because of the predominance of serpentinite in the area, background levels for serpentinite soil are used to evaluate metals concentrations at the BBDAs.

- **Protection of Groundwater at Drinking Water Levels** – Analytical results for petroleum related constituents at the BBDAs were compared to cleanup levels protective of groundwater assuming that the distance between petroleum impacted soil and groundwater of less than 5 ft.

MRFS sample results were screened using the same cleanup levels as the battery frontal slope samples, except that ecological buffer zone cleanup levels were used instead of ecological special status species cleanup levels.

It should be noted that the tables and figures included with this transmittal present preliminary (non-validated) analytical results for Phase 1 soil samples. Please also note that the cleanup levels used for evaluating these data may not be the cleanup levels that the Trust will ultimately select for all areas on the BBDA bluff tops. Portions of the bluff tops at the BBDAs are located in ecological buffer zones and samples collected from these areas could be screened against ecological buffer zone rather than ecological special status species cleanup levels. Because cleanup levels for several polycyclic aromatic hydrocarbons (PAHs), specifically benzo(a)pyrene, are based on human health residential cleanup levels, changes in the ecological cleanup levels considered would not affect whether PAHs would be selected as chemicals of concern (COCs). However, for several metals and pesticides, the most stringent applicable cleanup level is the ecological special status species cleanup level; therefore, the planned ecological land use (and associated cleanup level) would affect whether a sample would be considered to contain metals or pesticides at concentrations exceeding cleanup levels.

We plan to begin implementation of the field program following approval of these changes. Thank you for assisting us in this manner. If you have any questions, please feel free to e-mail or call me at (415) 561-4292.

Sincerely,

Craig Cooper

Craig Cooper
The Presidio Trust

Attachments: Table 1 - Proposed Phase 2 Sampling and Analyses Plan
Table 2a - Phase 1 Soil Sample Analytical Results –– Baker Beach Disturbed Areas
Table 2b - Phase 1 Soil Sample Analytical Results – Merchant Road Fill Site
Table 2c - Phase 1 Soil Sample Analytical Results – Dioxins and Furans
Table 3 - 2,3,7,8-Tetrachlordibenzo-p-dioxin (TCDD) Toxic Equivalency (TEQ) Calculations, BB1SB117 and MRFSTP114

Figure 1 - Proposed Phase 2 Soil Sample Locations and Phase 1 Samples Containing PCOCs at Concentrations Exceeding Screening Levels – Surface Samples
Figure 2 - Phase 1 Samples Containing PCOCs at Concentrations Exceeding Screening Levels, One-Foot Depth and Greater
Figures 3a through 3e - PCOCs in Soil, Baker Beach Disturbed Areas Frontal Slope and Bluff Top Areas

cc: George Ford, Trust
Brian Ullensvang, NPS
Devender Narala, RWQCB
Doug Kern, RAB
Mark Youngkin, RAB (cover letter only)

Table 1. Proposed Phase 2 Sampling and Analysis Plan

Site	Area	Station	Matrix	Sample Numbers[a]	Proposed Sample Depth Interval (feet)	Sample Type	Test Method	PAHs	Title 22 Metals	Organochlorine Pesticides	Percent moisture	Dioxins and Furans	Comments
							Soil Containers	I liner, 2 liners for MS/MSD				1 liner (subcontract lab)	
							Aqueous Containers[b]	2 x 1L G	1 x 0.5L Pl; Nitric Acid	2 x 1 L Amber	NA	NA	
BBDA 1A	Perimeter Area Sample	BB1ASB123	soil	BB1ASB123[ ]	0-0.5	Primary		X			X		Perimeter sample to define northern extent of PAH exceedances.
		BB1ASB123	soil	BB1ASB123[ ]	1-1.5	Primary		X			X		Perimeter sample to define western extent of PAH exceedances.
		BB1ASB124	soil	BB1ASB124[ ]	0-0.5	Primary		X			X		Perimeter sample to define western extent of PAH exceedances.
		BB1ASB124	soil	BB1ASB124[ ]	1-1.5	Primary		X			X		Perimeter sample to define western extent of PAH exceedances.
		BB1ASB125	soil	BB1ASB125[ ]	0-0.5	Primary		X			X		Perimeter sample to define western extent of PAH exceedances.
		BB1ASB125	soil	BB1ASB125[ ]	0-0.5	Duplicate		X			X		Perimeter sample to define western extent of PAH exceedances.
		BB1ASB125	soil	BB1ASB125[ ]	1-1.5	Primary		X			X		Perimeter sample to define western extent of PAH exceedances.
	Vertical depth confirmation borings	BB1ASB126	soil	BB1ASB126[ ]	1-1.5	Primary		X			X		Sample near BB1ATP405 to assess depth of contamination (no exceedance at 2 ft, brick debris at 6 in - fill sand throughout.)
		BB1ASB127	soil	BB1ASB127[ ]	1.5-2	Primary		X			X		Sample near BB1ATP403 to assess depth of contamination (no exceedance at 2 ft, asphalt chip at 1 ft - top soil upper 2 ft. native derived fill from 2 ft.)
		BB1ASB128	soil	BB1ASB128[ ]	1.5-2	Primary		X			X		Sample near BB1ATP401 to assess depth of contamination (no exceedance at 2 ft, native derived fill from 1.8 ft, a few gravel sized asphalt pieces in non native fill)
		BB1ASB129	soil	BB1ASB129[ ]	2.5-3	Primary		X			X		Sample near BB1ATP407 to assess depth of contamination (exceedance at 1.8 ft - native derived fill throughout)
		BB1ASB130	soil	BB1ASB130[ ]	2.5-3	Primary		X			X		Sample near BB1ATP409 to assess depth of contamination (exceedance at 1.5 ft, silty fill upper 1 ft., native derived fill from 1 ft.)
		BB1ASB131	soil	BB1ASB131[ ]	1-1.5	Primary		X			X		Sample near BB1ASB116 to assess depth of contamination (exceedance at surface)
		BB1ASB131	soil	BB1ASB131[ ]	2-2.5	Primary		X			X		Sample near BB1ASB116 to assess depth of contamination (exceedance at surface)
BBDA 1	Perimeter Area Sample	BB1SB126	soil	BB1SB126[ ]	0-0.5	Primary		X			X		Perimeter sample to define western extent of PAH exceedances.
		BB1SB126	soil	BB1SB126[ ]	1-1.5	Primary		X			X		Perimeter sample to define western extent of PAH exceedances.
		BB1SB127	soil	BB1SB127[ ]	0-0.5	Primary		X			X		Perimeter sample to define western extent of PAH exceedances.
		BB1SB127	soil	BB1SB127[ ]	0-0.5	Duplicate		X			X		Perimeter sample to define western extent of PAH exceedances.
		BB1SB127	soil	BB1SB127[ ]	1-1.5	Primary		X			X		Perimeter sample to define western extent of PAH exceedances.
	Vertical depth confirmation borings	BB1SB128	soil	BB1SB128[ ]	1.5-2.0	Primary		X			X		Sample near BB1TP420 to assess depth of contamination (no exceedance at 2 ft, trace asphalt and brick debris between 1 and 1.5 ft - silty fill)
		BB1SB129	soil	BB1SB129[ ]	1-1.5	Primary		X			X		Sample near BB1SB119 to assess depth of contamination (exceedance at surface)
	Magazine 21	BB1SB130	soil	BB1SB130[ ]	0-0.5	Primary		X	X	X	X	X	Sample north of Magazine 21 to access lateral extent of contamination related to waste fill.
		BB1SB130	soil	BB1SB130[ ]	0-0.5	Duplicate		X	X	X	X		Sample north of Magazine 21 to access lateral extent of contamination related to waste fill.
		BB1SB130	soil	BB1SB130[ ]	1-1.5	Primary		X	X	X	X	X	Sample north of Magazine 21 to access lateral extent of contamination related to waste fill.
		BB1SB131	soil	BB1SB131[ ]	0-0.5	Primary		X	X	X	X		Perimeter sample north of BB1SB11
		BB1SB131	soil	BB1SB131[ ]	1-1.5	Primary		X	X	X	X		Perimeter sample north of BB1SB11
BBDA 2A	Vertical depth confirmation borings	BB2ASB121	soil	BB2ASB121[ ]	2.5-3	Primary		X			X		Sample near BB2ATP416 to assess depth of contamination (exceedances at 1.5 & 2 ft., silty fill upper 1.3 ft., native fill from 1.3 ft.)
		BB2ASB121	soil	BB2ASB121[ ]	3-3.5	Primary		X			X		Sample near BB2ATP416 to assess depth of contamination (exceedances at 1.5 & 2 ft., silty fill upper 1.3 ft., native fill from 1.3 ft.)
		BB2ASB122	soil	BB2ASB122[ ]	1-1.5	Primary		X			X		Sample near BB2ASB115 to assess depth of contamination (exceedance at surface)
QC		Equipment blank[b]	water	__RB__[c]	NA	QC		X					
		Equipment blank[b]	water	__RB__[c]	NA	QC		X	X	X			

Notes:

[a] - Actual sample depth will be entered in parentheses at the end of the sample number for primary samples. For duplicate samples, the sample date will be entered following the DUP designation. If more than one duplicate sample is collected on a given day, '-1', '-2' will follow the date.

[b] - Aqueous containers are listed for equipment blank samples - one equipment blank sample will be collected each day that re-usable sampling equipment is used, not to exceed 10 percent of the total primary samples collected for this investigation.

[c] - The rinsate sample ID will be the ID number of the sample collected before the blank, followed by 'RB', followed by the ID number for the sample collected after the blank was poured

PAHs - Polycyclic aromatic hydrocarbons.
G - Amber glass.
Pl - Plastic.
L - Liter.
NA - Not applicable

Checked cuk

Approved MJH

Table 2a. Phase 1 Soil Sample Analytical Results
Baker Beach Disturbed Areas

	Station Number:		BB1ASB100	BB1ASB102	BB1ASB104	BB1ASB106	BB1ASB106	BB1ASB108	BB1ASB115	BB1ASB116	BB1ASB117	BB1ASB118
	Sample Date:	Human Health	12/13/06	12/11/06	12/11/06	12/13/06	12/13/06	12/13/06	12/13/06	12/14/06	12/14/06	12/13/06
	Sample Depth (feet):	Residential / Ecological	0	0	0	0	0	0	0	0	0	0
	Sample Number:	Special-Status	BB1ASB100[0]	BB1ASB102[0]	BB1ASB104[0]	BB1ASB106[0]	DUP121306-2	BB1ASB108[0]	BB1ASB115[0]	BB1ASB116[0]	BB1ASB117[0]	BB1ASB118[0]
	Lab Batch:	Serpentinite Soil	191471	191393	191393	191471	191471	191471	191471	191508	191508	191471
Test Method/Analyte Name	Units	Screening Levels	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
6010												
Antimony	mg/kg	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Arsenic	mg/kg	5.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Barium	mg/kg	320	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Beryllium	mg/kg	10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cadmium	mg/kg	1.9	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chromium	mg/kg	1700	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Cobalt	mg/kg	170	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Copper	mg/kg	85	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Lead	mg/kg	160	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Molybdenum	mg/kg	12	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Nickel	mg/kg	4500	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Selenium	mg/kg	0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Silver	mg/kg	2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Vanadium	mg/kg	74	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Zinc	mg/kg	160	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
7471A												
Mercury	mg/kg	0.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
8081A												
4,4'-DDE	mg/kg	0.098	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4,4'-DDT	mg/kg	0.0082	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
alpha-Chlordane	mg/kg	0.009*	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dieldrin	mg/kg	0.03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
gamma-Chlordane	mg/kg	0.009*	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Heptachlor	mg/kg	0.017	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
8270SIM												
2-Methylnaphthalene	mg/kg	30	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Acenaphthene	mg/kg	30	0.64 /J	ND(0.056)	ND(0.029)	ND(0.0058)	ND(0.013)	0.0013 /J	ND(0.006)	ND(0.056)	ND(0.0054)	ND(0.0055)
Acenaphthylene	mg/kg	30	6.6	0.026 /J	0.014 /J	ND(0.0058)	0.0041 /J	0.011 /J	0.0016 /J	0.07	0.0041 /J	0.024
Anthracene	mg/kg	30	6.2	0.027 /J	0.01 /J	ND(0.0058)	0.008 /J	0.011	0.0022 /J	0.039 /J	0.0023 /J	0.029
Benzo(a)anthracene	mg/kg	0.27	16	0.072	0.046	0.0029 /J	0.031	0.033	0.0094	0.17	0.0096	0.12
Benzo(a)pyrene	mg/kg	0.027	16	0.1	0.056	0.0033 /J	0.029	0.043	0.009	0.21	0.011	0.11
Benzo(b)fluoranthene	mg/kg	0.27	9.1	0.074	0.044	0.003 /J	0.019	0.03	0.008	0.15	0.0091	0.073
Benzo(g,h,i)perylene	mg/kg	30	9.1	0.14	0.035	0.0031 /J	0.016	0.025	0.0062	0.11	0.007	0.065
Benzo(k)fluoranthene	mg/kg	0.27	7.2	0.089	0.048	0.0028 /J	0.017	0.041	0.0073	0.18	0.01	0.092
Chrysene	mg/kg	2.7	15	0.1	0.077	0.0043 /J	0.032	0.055	0.012	0.27	0.015	0.15
Dibenzo(a,h)anthracene	mg/kg	0.078	3.3	0.0074 /J	0.0045 /J	0.0012 /J	0.0063 /J	0.017	0.0066	0.081	0.0061	0.032
Fluoranthene	mg/kg	30	25	0.22	0.14	0.0069	0.067	0.1	0.022	0.58	0.037	0.23
Fluorene	mg/kg	30	3.7	0.01 /J	0.013 /J	ND(0.0058)	0.0023 /J	0.0059 /J	0.0014 /J	0.03 /J	0.0037 /J	0.0077
Indeno(1,2,3-cd)pyrene	mg/kg	0.27	8.4	0.035 /J	0.018 /J	0.0029 /J	0.016	0.024	0.0065	0.12	0.0075	0.075
Naphthalene	mg/kg	9	8	ND(0.056)	0.059	ND(0.0058)	0.0046 /J	0.007	0.0016 /J	0.02 /J	0.0058	0.0078
Phenanthrene	mg/kg	30	37	0.16	0.2	0.0051 /J	0.058	0.094	0.018	0.57	0.043	0.17
Pyrene	mg/kg	30	34	0.24	0.23	0.0088	0.075	0.12	0.025	0.66	0.039	0.25
D2216												
Percent Moisture	%	-	20.	11.	13.	14.	21.	23.	17.	11.	7.0	9.0

[1] Screening Levels for area outside of the freshwater seep zone and comprise the most stringent of the following cleanup levels: (1) human health residential, (2) ecological special status species, (3) protection of groundwater at drinking water levels (distance between petroleum and groundwater is less than 5 ft). For metals, serpentinite background is selected if it is greater than the most stringent of human health and ecological cleanup levels.

*	Screening level for sum of alpha and gamma chlordane.
mg/kg	Milligrams per kilogram.
ND(0.029)	Not detected at reporting limit indicated in parentheses.
NT	Not tested.
☐	Results outlined by a box indicate detected concentrations exceed screening levels.

The analytical data presented on this table are preliminary and have not undergone Level III data validation.

J	Estimated value
b	High response observed for analyte in initial or continuing calibration verification; analyte was not detected above the reporting limit in the associated sample

Table 2a. Phase 1 Soil Sample Analytical Results
Baker Beach Disturbed Areas

	Station Number:		BB1ASB119		BB1ASB119		BB1ASB120		BB1ASB121		BB1ASB122		BB1ATP401		BB1ATP401		BB1ATP403		BB1ATP403		BB1ATP405	
	Sample Date:	Human Health	12/13/06		12/13/06		12/13/06		12/13/06		12/13/06		12/13/06		12/13/06		12/11/06		12/11/06		12/11/06	
	Sample Depth (feet):	Residential / Ecological	0		0		0		0		0		0		2		0		2		0	
	Sample Number:	Special-Status	BB1ASB119[0]		DUP121306-3		BB1ASB120[0]		BB1ASB121[0]		BB1ASB122[0]		BB1ATP401[0]		BB1ATP401[2]		BB1ATP403[0]		BB1ATP403[2]		BB1ATP405[0]	
	Lab Batch:	Serpentinite Soil	191471		191471		191471		191471		191471		191471		191471		191393		191393		191393	
Test Method/Analyte Name	Units	Screening Levels	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
6010																						
Antimony	mg/kg	5	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Arsenic	mg/kg	5.4	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Barium	mg/kg	320	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Beryllium	mg/kg	10	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Cadmium	mg/kg	1.9	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Chromium	mg/kg	1700	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Cobalt	mg/kg	170	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Copper	mg/kg	85	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Lead	mg/kg	160	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Molybdenum	mg/kg	12	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Nickel	mg/kg	4500	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Selenium	mg/kg	0.5	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Silver	mg/kg	2	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Vanadium	mg/kg	74	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Zinc	mg/kg	160	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
7471A																						
Mercury	mg/kg	0.4	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
8081A																						
4,4'-DDE	mg/kg	0.098	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
4,4'-DDT	mg/kg	0.0082	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
alpha-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Dieldrin	mg/kg	0.03	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
gamma-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Heptachlor	mg/kg	0.017	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
8270SIM																						
2-Methylnaphthalene	mg/kg	30	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Acenaphthene	mg/kg	30	ND(0.0055)		ND(0.0054)		ND(0.0056)		ND(0.014)		ND(0.06)		0.02	/J	ND(0.0059)		0.17	/J	ND(0.0058)		0.02	/J
Acenaphthylene	mg/kg	30	ND(0.0055)		ND(0.0054)		ND(0.0056)		ND(0.014)		0.011	/J	0.27		ND(0.0059)		1.4		0.0012	/J	0.15	
Anthracene	mg/kg	30	ND(0.0055)		ND(0.0054)		ND(0.0056)		ND(0.014)		ND(0.06)		0.23		ND(0.0059)		1.2		ND(0.0058)		0.22	
Benzo(a)anthracene	mg/kg	0.27	0.0012	/J	ND(0.0054)		0.00091	/J	0.0077	/J	0.039	/J	0.65		0.0011	/J	3		0.0042	/J	0.57	
Benzo(a)pyrene	mg/kg	0.027	0.0015	/J	ND(0.0054)		ND(0.0056)		0.0061	/J	0.045	/J	0.91		ND(0.0059)		4		0.005	/J	0.69	
Benzo(b)fluoranthene	mg/kg	0.27	0.0021	/J	0.00059	/J	0.00086	/J	0.0094	/J	0.047	/J	0.61		ND(0.0059)		2.8		0.0042	/J	0.45	
Benzo(g,h,i)perylene	mg/kg	30	0.0025	/Jb	0.0019	/Jb	0.00085	/J	0.0056	/J	0.038	/J	0.55		0.00097	/J	3.7		0.0055	/J	0.63	
Benzo(k)fluoranthene	mg/kg	0.27	0.0019	/J	ND(0.0054)		ND(0.0056)		0.0076	/J	0.046	/J	0.65		ND(0.0059)		3.7		0.0049	/J	0.61	
Chrysene	mg/kg	2.7	0.0025	/J	0.0014	/J	0.0015	/J	0.014		0.088		1.1		ND(0.0059)		5.8		0.0078		0.98	
Dibenzo(a,h)anthracene	mg/kg	0.078	ND(0.0055)		ND(0.0054)		ND(0.0056)		ND(0.014)		0.014	/J	0.21		ND(0.0059)		0.43		0.0014	/Jb	0.15	
Fluoranthene	mg/kg	30	0.004	/J	0.0019	/J	0.0014	/J	0.015		0.1		1.9		0.0015	/J	13		0.016		2.1	
Fluorene	mg/kg	30	ND(0.0055)		ND(0.0054)		ND(0.0056)		ND(0.014)		ND(0.06)		0.093		ND(0.0059)		0.64		0.001	/J	0.075	/J
Indeno(1,2,3-cd)pyrene	mg/kg	0.27	0.0016	/Jb	0.0011	/Jb	0.0008	/J	0.0058	/J	0.041	/J	0.52		ND(0.0059)		1.4		0.0043	/Jb	0.48	
Naphthalene	mg/kg	9	ND(0.0055)		ND(0.0054)		ND(0.0056)		ND(0.014)		ND(0.06)		0.11		ND(0.0059)		1.2		0.0034	/J	0.2	
Phenanthrene	mg/kg	30	0.0024	/J	0.0013	/J	ND(0.0056)		0.008	/J	0.095		2.2		0.0016	/J	15		0.023		2.1	
Pyrene	mg/kg	30	0.004	/J	0.0019	/J	0.0019	/J	0.017		0.14		2.2		0.0019	/J	14		0.025		2.1	
D2216																						
Percent Moisture	%	-	10.		7.0		11.		64.		17.		18.		16.		29.		14.		10.	

[1] Screening Levels for area outside of the freshwater seep zone and comprise the most stringent of the following cleanup levels: (1) human health residential, (2) ecological special status species, (3) protection of groundwater at drinking water levels (distance between petroleum and groundwater is less than 5 ft). For metals, serpentinite background is selected if it is greater than the most stringent of human health and ecological cleanup levels.

*	Screening level for sum of alpha and gamma chlordane.
mg/kg	Milligrams per kilogram.
ND(0.029)	Not detected at reporting limit indicated in parentheses.
NT	Not tested.
☐	Results outlined by a box indicate detected concentrations exceed screening levels.

The analytical data presented on this table are preliminary and have not undergone Level III data validation.

J	Estimated value
b	High response observed for analyte in initial or continuing calibration verification; analyte was not detected above the reporting limit in the associated sample

Table 2a. Phase 1 Soil Sample Analytical Results
Baker Beach Disturbed Areas

		Station Number:		BB1ATP405		BB1ATP407		BB1ATP407		BB1ATP409		BB1ATP409		BB1ATP410		BB1ATP410		BB1ATP411		BB1ATP411		BB1ATP412	
		Sample Date:	Human Health	12/11/06		12/14/06		12/14/06		12/13/06		12/13/06		12/14/06		12/14/06		12/14/06		12/14/06		12/14/06	
		Sample Depth (feet):	Residential / Ecological	2		0		1.8		0		1.5		0		2.7		0		2.6		0	
		Sample Number:	Special-Status	BB1ATP405[2]		BB1ATP407[0]		BB1ATP407[1.8]		BB1ATP409[0]		BB1ATP409[1.5]		BB1ATP410[0]		BB1ATP410[2.7]		BB1ATP411[0]		BB1ATP411[2.6]		BB1ATP412[0]	
		Lab Batch:	Serpentinite Soil	191393		191508		191508		191471		191471		191508		191508		191508		191508		191508	
Test Method/Analyte Name		Units	Screening Levels	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
6010																							
	Antimony	mg/kg	5	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Arsenic	mg/kg	5.4	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Barium	mg/kg	320	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Beryllium	mg/kg	10	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Cadmium	mg/kg	1.9	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Chromium	mg/kg	1700	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Cobalt	mg/kg	170	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Copper	mg/kg	85	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Lead	mg/kg	160	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Molybdenum	mg/kg	12	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Nickel	mg/kg	4500	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Selenium	mg/kg	0.5	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Silver	mg/kg	2	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Vanadium	mg/kg	74	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Zinc	mg/kg	160	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
7471A																							
	Mercury	mg/kg	0.4	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
8081A																							
	4,4'-DDE	mg/kg	0.098	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	4,4'-DDT	mg/kg	0.0082	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	alpha-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Dieldrin	mg/kg	0.03	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	gamma-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Heptachlor	mg/kg	0.017	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
8270SIM																							
	2-Methylnaphthalene	mg/kg	30	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
	Acenaphthene	mg/kg	30	ND(0.059)		ND(1.5)		0.0022	/J	ND(0.32)		ND(0.0059)		ND(1.3)		0.21	/J	ND(0.15)		ND(0.012)		ND(0.0058)	
	Acenaphthylene	mg/kg	30	ND(0.059)		1.1	/J	0.031		0.5		0.019		ND(1.3)		3.1		0.14	/J	ND(0.012)		ND(0.0058)	
	Anthracene	mg/kg	30	ND(0.059)		0.6	/J	0.02		0.26	/J	0.011		ND(1.3)		3.4		0.15		ND(0.012)		ND(0.0058)	
	Benzo(a)anthracene	mg/kg	0.27	ND(0.059)		3.1		0.044		1.4		0.045		0.59	/J	5.2		0.42		0.0047	/J	ND(0.0058)	
	Benzo(a)pyrene	mg/kg	0.027	ND(0.059)		4.4		0.075		2		0.042		0.73	/J	5.7		0.51		0.0055	/J	ND(0.0058)	
	Benzo(b)fluoranthene	mg/kg	0.27	ND(0.059)		3.5		0.054		1.6		0.025		0.45	/J	2.9		0.31		0.015		ND(0.0058)	
	Benzo(g,h,i)perylene	mg/kg	30	ND(0.059)		2.9		0.044		1.2		0.028		0.46	/J	4		0.38		0.019		ND(0.0058)	
	Benzo(k)fluoranthene	mg/kg	0.27	ND(0.059)		4.3		0.057		2		0.025		0.52	/J	2.9		0.35		0.013		ND(0.0058)	
	Chrysene	mg/kg	2.7	ND(0.059)		5.4		0.092		2.3		0.052		0.74	/J	5.7		0.49		0.0097	/J	0.00087	/J
	Dibenzo(a,h)anthracene	mg/kg	0.078	ND(0.059)		2		0.035		0.61		0.011		1.1	/J	2.5		0.21		0.013		ND(0.0058)	
	Fluoranthene	mg/kg	30	ND(0.059)		12		0.18		5.4		0.1		1.3	/J	10		1.2		0.0083	/J	ND(0.0058)	
	Fluorene	mg/kg	30	ND(0.059)		0.42	/J	0.011		0.14	/J	0.0028	/J	ND(1.3)		1.2		0.13	/J	ND(0.012)		ND(0.0058)	
	Indeno(1,2,3-cd)pyrene	mg/kg	0.27	ND(0.059)		3		0.043		1.2		0.027		0.38	/J	2.9		0.33		0.014		ND(0.0058)	
	Naphthalene	mg/kg	9	ND(0.059)		0.38	/J	0.011		0.094	/J	0.0012	/J	ND(1.3)		0.45	/J	0.14	/J	ND(0.012)		ND(0.0058)	
	Phenanthrene	mg/kg	30	ND(0.059)		11		0.23		3.8		0.085		1	/J	12		1.1		0.0062	/J	ND(0.0058)	
	Pyrene	mg/kg	30	ND(0.059)		14		0.2		5		0.1		2		15		1.3		0.01	/J	0.0012	/J
D2216																							
	Percent Moisture	%	-	15.		18.		19.		23.		15.		7.0		4.0		16.		14.		14.	

[1] Screening Levels for area outside of the freshwater seep zone and comprise the most stringent of the following cleanup levels: (1) human health residential, (2) ecological special status species, (3) protection of groundwater at drinking water levels (distance between petroleum and groundwater is less than 5 ft). For metals, serpentinite background is selected if it is greater than the most stringent of human health and ecological cleanup levels.

*	Screening level for sum of alpha and gamma chlordane.
mg/kg	Milligrams per kilogram.
ND(0.029)	Not detected at reporting limit indicated in parentheses.
NT	Not tested.
▭	Results outlined by a box indicate detected concentrations exceed screening levels.

The analytical data presented on this table are preliminary and have not undergone Level III data validation.

J	Estimated value
b	High response observed for analyte in initial or continuing calibration verification; analyte was not detected above the reporting limit in the associated sample

Table 2a. Phase 1 Soil Sample Analytical Results
Baker Beach Disturbed Areas

Station Number:			BB1ATP412		BB1ATP412		BB1ATP413		BB1ATP413		BB1ATP414		BB1ATP414		BB1SB116		BB1SB116		BB1SB117		BB1SB117	
Sample Date:		Human Health	12/14/06		12/14/06		12/14/06		12/14/06		12/14/06		12/14/06		12/12/06		12/12/06		12/12/06		12/12/06	
Sample Depth (feet):		Residential / Ecological	0		2.5		0.3		3.1		0		1.5		0		1		0		1	
Sample Number:		Special-Status	DUP121406-1		BB1ATP412[2.5]		BB1ATP413[0.3]		BB1ATP413[3.1]		BB1ATP414[0]		BB1ATP414[1.5]		BB1SB116[0]		BB1SB116[1]		BB1SB117[0]		BB1SB117[1]	
Lab Batch:		Serpentinite Soil	191508		191508		191508		191508		191508		191508		191439		191439		191439		191439	
Test Method/Analyte Name	Units	Screening Levels	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
6010																						
Antimony	mg/kg	5	NT		NT		NT		NT		NT		NT		1.1	/J	0.56	/J	0.84	/J	2.0	/J
Arsenic	mg/kg	5.4	NT		NT		NT		NT		NT		NT		2.9		1.6		3.0		3.4	
Barium	mg/kg	320	NT		NT		NT		NT		NT		NT		130.		710.		110.		270.	
Beryllium	mg/kg	10	NT		NT		NT		NT		NT		NT		0.28		0.36		0.35		0.30	
Cadmium	mg/kg	1.9	NT		NT		NT		NT		NT		NT		0.30	/J	ND(0.29)		0.21	/J	1.6	
Chromium	mg/kg	1700	NT		NT		NT		NT		NT		NT		61.		32.		63.		70.	
Cobalt	mg/kg	170	NT		NT		NT		NT		NT		NT		10.		12.		11.		11.	
Copper	mg/kg	85	NT		NT		NT		NT		NT		NT		32.		93.		22.		130.	
Lead	mg/kg	160	NT		NT		NT		NT		NT		NT		130.		14.		55.		590.	
Molybdenum	mg/kg	12	NT		NT		NT		NT		NT		NT		0.64	/J	0.32	/J	0.45	/J	1.2	/J
Nickel	mg/kg	4500	NT		NT		NT		NT		NT		NT		48.		38.		47.		82.	
Selenium	mg/kg	0.5	NT		NT		NT		NT		NT		NT		0.13	/J	0.22	/J	0.15	/J	0.20	/J
Silver	mg/kg	2	NT		NT		NT		NT		NT		NT		ND(0.32)		ND(0.29)		ND(0.31)		2.8	
Vanadium	mg/kg	74	NT		NT		NT		NT		NT		NT		49.		51.		53.		52.	
Zinc	mg/kg	160	NT		NT		NT		NT		NT		NT		120.		39.		130.		1,500.	
7471A																						
Mercury	mg/kg	0.4	NT		NT		NT		NT		NT		NT		0.33		0.11		0.10		0.84	
8081A																						
4,4'-DDE	mg/kg	0.098	NT		NT		NT		NT		NT		NT		ND(0.02)		ND(0.0038)		0.0026	/J	0.013	/J
4,4'-DDT	mg/kg	0.0082	NT		NT		NT		NT		NT		NT		ND(0.02)		ND(0.0038)		0.0064		0.073	
alpha-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		ND(0.01)		ND(0.002)		0.00064	/J	ND(0.022)	
Dieldrin	mg/kg	0.03	NT		NT		NT		NT		NT		NT		ND(0.02)		ND(0.0038)		0.0042		0.016	/J
gamma-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		ND(0.01)		ND(0.002)		0.0013	/CJ	ND(0.022)	
Heptachlor	mg/kg	0.017	NT		NT		NT		NT		NT		NT		ND(0.01)		ND(0.002)		0.00055	/CJ	ND(0.022)	
8270SIM																						
2-Methylnaphthalene	mg/kg	30	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Acenaphthene	mg/kg	30	ND(0.006)		ND(0.0056)		ND(0.026)		ND(0.027)		0.0013	/J	ND(0.0057)		0.0069		0.035		ND(0.012)		ND(0.13)	
Acenaphthylene	mg/kg	30	ND(0.006)		ND(0.0056)		ND(0.026)		ND(0.027)		0.0053	/J	ND(0.0057)		0.038		0.018		0.0015	/J	ND(0.13)	
Anthracene	mg/kg	30	ND(0.006)		ND(0.0056)		ND(0.026)		ND(0.027)		0.0038	/J	ND(0.0057)		0.064		0.077		ND(0.012)		ND(0.13)	
Benzo(a)anthracene	mg/kg	0.27	0.00095	/J	0.0011	/Jb	ND(0.026)		ND(0.027)		0.018		ND(0.0057)		0.14		0.21		0.011	/J	ND(0.13)	
Benzo(a)pyrene	mg/kg	0.027	0.0013	/J	ND(0.0056)		0.0048	/J	ND(0.027)		0.022		ND(0.0057)		0.12		0.19		0.0091	/J	ND(0.13)	
Benzo(b)fluoranthene	mg/kg	0.27	0.0014	/J	ND(0.0056)		0.0055	/J	ND(0.027)		0.02		ND(0.0057)		0.076		0.15		0.0064	/J	ND(0.13)	
Benzo(g,h,i)perylene	mg/kg	30	0.0011	/J	ND(0.0056)		0.0047	/J	ND(0.027)		0.016		ND(0.0057)		0.055		0.11		0.0066	/J	0.058	/Jb
Benzo(k)fluoranthene	mg/kg	0.27	0.0014	/J	ND(0.0056)		0.005	/J	ND(0.027)		0.021		ND(0.0057)		0.079		0.13		0.006	/J	ND(0.13)	
Chrysene	mg/kg	2.7	0.0022	/J	ND(0.0056)		0.005	/J	ND(0.027)		0.025		ND(0.0057)		0.14		0.22		0.01	/J	ND(0.13)	
Dibenzo(a,h)anthracene	mg/kg	0.078	ND(0.006)		ND(0.0056)		ND(0.026)		ND(0.027)		0.0099		ND(0.0057)		0.019		0.03		ND(0.012)		0.022	/Jb
Fluoranthene	mg/kg	30	0.0035	/J	0.0046	/J	0.0082	/J	ND(0.027)		0.047		ND(0.0057)		0.29		0.46		0.025		ND(0.13)	
Fluorene	mg/kg	30	ND(0.006)		ND(0.0056)		ND(0.026)		ND(0.027)		0.0028	/J	ND(0.0057)		0.014		0.035		ND(0.012)		ND(0.13)	
Indeno(1,2,3-cd)pyrene	mg/kg	0.27	0.001	/J	ND(0.0056)		0.0037	/J	ND(0.027)		0.015		ND(0.0057)		0.05		0.09		0.0047	/J	0.018	/Jb
Naphthalene	mg/kg	9	ND(0.006)		ND(0.0056)		ND(0.026)		ND(0.027)		0.003	/J	ND(0.0057)		0.0077		0.088		ND(0.012)		ND(0.13)	
Phenanthrene	mg/kg	30	0.0021	/J	ND(0.0056)		ND(0.026)		ND(0.027)		0.038		ND(0.0057)		0.28		0.4		0.011	/J	ND(0.13)	
Pyrene	mg/kg	30	0.0041	/J	ND(0.0056)		0.0085	/J	ND(0.027)		0.063		0.00069	/J	0.39		0.45		0.029		ND(0.13)	
D2216																						
Percent Moisture	%	-	17.		11.		4.0		8.0		19.		13.		NT		NT		NT		NT	

[1] Screening Levels for area outside of the freshwater seep zone and comprise the most stringent of the following cleanup levels: (1) human health residential, (2) ecological special status species, (3) protection of groundwater at drinking water levels (distance between petroleum and groundwater is less than 5 ft). For metals, serpentinite background is selected if it is greater than the most stringent of human health and ecological cleanup levels.

*	Screening level for sum of alpha and gamma chlordane.
mg/kg	Milligrams per kilogram.
ND(0.029)	Not detected at reporting limit indicated in parentheses.
NT	Not tested.
☐	Results outlined by a box indicate detected concentrations exceed screening levels.

The analytical data presented on this table are preliminary and have not undergone Level III data validation.

J	Estimated value
b	High response observed for analyte in initial or continuing calibration verification; analyte was not detected above the reporting limit in the associated sample

Table 2a. Phase 1 Soil Sample Analytical Results
Baker Beach Disturbed Areas

	Station Number:		BB1SB118		BB1SB118		BB1SB118		BB1SB119		BB1SB122		BB1SB123		BB1SB124		BB1SB125		BB1TP420		BB1TP420	
	Sample Date:	Human Health	12/12/06		12/12/06		12/12/06		12/11/06		12/13/06		12/13/06		12/14/06		12/12/06		12/11/06		12/11/06	
	Sample Depth (feet):	Residential / Ecological	0		1		1.5		0		0		0		0		0		0		2	
	Sample Number:	Special-Status	BB1SB118[0]		BB1SB118[1]		DUP121206-1		BB1SB119[0]		BB1SB122[0]		BB1SB123[0]		BB1SB124[0]		BB1SB125[0]		BB1TP420[0]		BB1TP420[2]	
	Lab Batch:	Serpentinite Soil	191439		191439		191439		191392		191472		191472		191509		191439		191392		191392	
Test Method/Analyte Name	Units	Screening Levels	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
6010																						
Antimony	mg/kg	5	1.5	/J	0.45	/J	0.48	/J	NT		NT		NT		NT		NT		NT		NT	
Arsenic	mg/kg	5.4	3.9		1.6		3.8		NT		NT		NT		NT		NT		NT		NT	
Barium	mg/kg	320	250.		82.		120.		NT		NT		NT		NT		NT		NT		NT	
Beryllium	mg/kg	10	0.41		0.21		0.46		NT		NT		NT		NT		NT		NT		NT	
Cadmium	mg/kg	1.9	0.74		ND(0.29)		0.05	/J	NT		NT		NT		NT		NT		NT		NT	
Chromium	mg/kg	1700	120.		150.		240.		NT		NT		NT		NT		NT		NT		NT	
Cobalt	mg/kg	170	15.		16.		43.		NT		NT		NT		NT		NT		NT		NT	
Copper	mg/kg	85	56.		12.		16.		NT		NT		NT		NT		NT		NT		NT	
Lead	mg/kg	160	$\boxed{340.}$		20.		10.		NT		NT		NT		NT		NT		NT		NT	
Molybdenum	mg/kg	12	0.91	/J	0.46	/J	0.69	/J	NT		NT		NT		NT		NT		NT		NT	
Nickel	mg/kg	4500	140.		160.		220.		NT		NT		NT		NT		NT		NT		NT	
Selenium	mg/kg	0.5	0.18	/J	ND(0.29)		$\boxed{1.0}$		NT		NT		NT		NT		NT		NT		NT	
Silver	mg/kg	2	ND(0.35)		ND(0.29)		ND(0.31)		NT		NT		NT		NT		NT		NT		NT	
Vanadium	mg/kg	74	57.		57.		71.		NT		NT		NT		NT		NT		NT		NT	
Zinc	mg/kg	160	$\boxed{290.}$		36.		36.		NT		NT		NT		NT		NT		NT		NT	
7471A																						
Mercury	mg/kg	0.4	0.28		0.029		0.038		NT		NT		NT		NT		NT		NT		NT	
8081A																						
4,4'-DDE	mg/kg	0.098	ND(0.023)		ND(0.0039)		ND(0.004)		NT		NT		NT		NT		NT		NT		NT	
4,4'-DDT	mg/kg	0.0082	$\boxed{0.012}$	/J	0.0057		ND(0.004)		NT		NT		NT		NT		NT		NT		NT	
alpha-Chlordane	mg/kg	0.009*	ND(0.012)		ND(0.002)		ND(0.0021)		NT		NT		NT		NT		NT		NT		NT	
Dieldrin	mg/kg	0.03	ND(0.023)		ND(0.0039)		ND(0.004)		NT		NT		NT		NT		NT		NT		NT	
gamma-Chlordane	mg/kg	0.009*	ND(0.012)		ND(0.002)		ND(0.0021)		NT		NT		NT		NT		NT		NT		NT	
Heptachlor	mg/kg	0.017	ND(0.012)		ND(0.002)		ND(0.0021)		NT		NT		NT		NT		NT		NT		NT	
8270SIM																						
2-Methylnaphthalene	mg/kg	30	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Acenaphthene	mg/kg	30	ND(0.034)		ND(0.0059)		ND(0.0061)		0.017	/J	ND(0.056)		ND(0.0059)		0.015	/J	ND(0.017)		0.2	/J	ND(0.0057)	
Acenaphthylene	mg/kg	30	0.077		ND(0.0059)		0.0014	/J	0.15		ND(0.056)		ND(0.0059)		0.2		0.008	/J	1.4		0.0018	/J
Anthracene	mg/kg	30	0.046		ND(0.0059)		ND(0.0061)		0.063		ND(0.056)		ND(0.0059)		0.22		0.0074	/J	1.3		ND(0.0057)	
Benzo(a)anthracene	mg/kg	0.27	0.15		0.0038	/J	0.0057	/J	0.25		0.018	/Jb	ND(0.0059)		$\boxed{0.59}$		0.025		$\boxed{2.8}$		0.0059	
Benzo(a)pyrene	mg/kg	0.027	$\boxed{0.16}$		0.0034	/J	0.0063		$\boxed{0.33}$		0.014	/J	ND(0.0059)		$\boxed{0.56}$		$\boxed{0.032}$		$\boxed{3.8}$		0.0057	/J
Benzo(b)fluoranthene	mg/kg	0.27	0.1		0.0026	/J	0.0051	/J	0.26		0.012	/J	ND(0.0059)		$\boxed{0.41}$		0.026		$\boxed{2.6}$		0.0039	/J
Benzo(g,h,i)perylene	mg/kg	30	0.11		0.0024	/J	0.0048	/J	0.2		0.011	/J	ND(0.0059)		0.25		0.02		3.9		0.0063	
Benzo(k)fluoranthene	mg/kg	0.27	0.12		0.0026	/J	0.0054	/J	$\boxed{0.32}$		ND(0.056)		ND(0.0059)		$\boxed{0.36}$		0.033		$\boxed{3.4}$		0.0044	/J
Chrysene	mg/kg	2.7	0.2		0.004	/J	0.0081		0.53		0.023	/J	ND(0.0059)		0.66		0.047		$\boxed{5.7}$		0.0075	
Dibenzo(a,h)anthracene	mg/kg	0.078	0.028	/J	ND(0.0059)		0.0013	/J	0.04		ND(0.056)		ND(0.0059)		$\boxed{0.1}$		0.015	/Jb	$\boxed{0.45}$		0.0022	/Jb
Fluoranthene	mg/kg	30	0.33		0.011		0.018		0.88		0.066		0.0053	/J	1.3		0.097		12		0.01	
Fluorene	mg/kg	30	0.0084	/J	ND(0.0059)		ND(0.0061)		0.086		ND(0.056)		ND(0.0059)		0.086		ND(0.017)		0.75		ND(0.0057)	
Indeno(1,2,3-cd)pyrene	mg/kg	0.27	0.092		0.0019	/J	0.0039	/J	0.13		0.012	/J	ND(0.0059)		0.27		0.03		$\boxed{1.5}$		0.0048	/Jb
Naphthalene	mg/kg	9	0.0095	/J	ND(0.0059)		0.00094	/J	0.43		ND(0.056)		ND(0.0059)		0.035	/J	ND(0.017)		1.6		ND(0.0057)	
Phenanthrene	mg/kg	30	0.2		0.007		0.014		1.4		0.023	/J	0.00086	/J	1.5		0.073		17		0.0087	
Pyrene	mg/kg	30	0.42		0.0094		0.017		1.4		0.037	/Jb	0.001	/Jb	1.3		0.11		15		0.019	
D2216																						
Percent Moisture	%	-	NT		NT		NT		33.		11.		16.		34.		NT		14.		13.	

[1] Screening Levels for area outside of the freshwater seep zone and comprise the most stringent of the following cleanup levels: (1) human health residential, (2) ecological special status species, (3) protection of groundwater at drinking water levels (distance between petroleum and groundwater is less than 5 ft). For metals, serpentinite background is selected if it is greater than the most stringent of human health and ecological cleanup levels.

*	Screening level for sum of alpha and gamma chlordane.
mg/kg	Milligrams per kilogram.
ND(0.029)	Not detected at reporting limit indicated in parentheses.
NT	Not tested.
$\boxed{\quad\quad}$	Results outlined by a box indicate detected concentrations exceed screening levels.

The analytical data presented on this table are preliminary and have not undergone Level III data validation.

J	Estimated value
b	High response observed for analyte in initial or continuing calibration verification; analyte was not detected above the reporting limit in the associated sample

Table 2a. Phase 1 Soil Sample Analytical Results
Baker Beach Disturbed Areas

Station Number:			BB1TP421		BB1TP421		BB1TP421		BB1TP426		BB1TP426		BB2ASB113		BB2ASB115		BB2ASB117		BB2ASB120		BB2ATP414	
Sample Date:		Human Health	12/13/06		12/13/06		12/13/06		12/12/06		12/12/06		12/11/06		12/11/06		12/11/06		12/11/06		12/11/06	
Sample Depth (feet):		Residential / Ecological	0		0		1.8		0		1.5		0		0		0		0		0	
Sample Number:		Special-Status	BB1TP421[0]		DUP121306-1		BB1TP421[1.8]		BB1TP426[0]		BB1TP426[1.5]		BB2ASB113[0]		BB2ASB115[0]		BB2ASB117[0]		BB2ASB120[0]		BB2ATP414[0]	
Lab Batch:		Serpentinite Soil	191472		191472		191472		191439		191439		191394		191442		191442		191442		191394	
Test Method/Analyte Name	Units	Screening Levels	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
6010																						
Antimony	mg/kg	5	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Arsenic	mg/kg	5.4	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Barium	mg/kg	320	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Beryllium	mg/kg	10	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Cadmium	mg/kg	1.9	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Chromium	mg/kg	1700	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Cobalt	mg/kg	170	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Copper	mg/kg	85	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Lead	mg/kg	160	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Molybdenum	mg/kg	12	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Nickel	mg/kg	4500	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Selenium	mg/kg	0.5	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Silver	mg/kg	2	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Vanadium	mg/kg	74	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Zinc	mg/kg	160	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
7471A																						
Mercury	mg/kg	0.4	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
8081A																						
4,4'-DDE	mg/kg	0.098	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
4,4'-DDT	mg/kg	0.0082	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
alpha-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Dieldrin	mg/kg	0.03	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
gamma-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Heptachlor	mg/kg	0.017	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
8270SIM																						
2-Methylnaphthalene	mg/kg	30	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Acenaphthene	mg/kg	30	ND(0.061)		ND(0.058)		ND(0.0059)		0.016	/J	ND(0.006)		ND(0.066)		ND(0.31)		ND(0.028)		ND(0.07)		0.0095	/J
Acenaphthylene	mg/kg	30	0.0098	/J	0.018	/J	ND(0.0059)		0.36		ND(0.006)		0.028	/J	0.17	/J	0.018	/J	0.037	/J	0.12	
Anthracene	mg/kg	30	ND(0.061)		ND(0.058)		ND(0.0059)		0.2		ND(0.006)		0.029	/J	0.15	/J	0.017	/J	0.032	/J	0.12	
Benzo(a)anthracene	mg/kg	0.27	0.021	/J	0.043	/J	0.0018	/Jb	1.1		0.0019	/J	0.07		0.36		0.04		0.091		0.29	
Benzo(a)pyrene	mg/kg	0.027	0.029	/J	0.055	/J	0.0014	/J	1.3		0.0017	/J	0.08		0.51		0.055		0.12		0.31	
Benzo(b)fluoranthene	mg/kg	0.27	0.021	/J	0.037	/J	0.0011	/J	0.98		0.0015	/J	0.065	/J	0.48		0.061		0.12		0.21	
Benzo(g,h,i)perylene	mg/kg	30	0.021	/J	0.04	/J	0.0013	/J	0.82		0.0014	/J	0.067		0.34		0.049		0.1		0.21	
Benzo(k)fluoranthene	mg/kg	0.27	0.018	/J	0.032	/J	ND(0.0059)		0.95		0.0019	/J	0.08		0.57		0.066		0.12		0.27	
Chrysene	mg/kg	2.7	0.035	/J	0.073		0.0015	/J	1.5		0.0025	/J	0.12		0.73		0.087		0.18		0.47	
Dibenzo(a,h)anthracene	mg/kg	0.078	ND(0.061)		0.016	/J	ND(0.0059)		0.27		ND(0.006)		ND(0.066)		0.13	/J	0.017	/J	0.037	/J	0.027	/J
Fluoranthene	mg/kg	30	0.1		0.17		0.0062		3.4		0.0091		0.25		1.6		0.16		0.36		0.96	
Fluorene	mg/kg	30	ND(0.061)		ND(0.058)		ND(0.0059)		0.055	/J	ND(0.006)		0.011	/J	ND(0.31)		ND(0.028)		ND(0.07)		0.043	
Indeno(1,2,3-cd)pyrene	mg/kg	0.27	0.021	/J	0.04	/J	0.001	/J	0.69		0.0011	/J	0.019	/J	0.34		0.043		0.082		0.081	
Naphthalene	mg/kg	9	ND(0.061)		0.015	/J	0.001	/J	0.081	/J	ND(0.006)		0.046	/J	0.076	/J	0.0056	/J	0.016	/J	0.091	
Phenanthrene	mg/kg	30	0.053	/J	0.16		0.0018	/J	3.4		0.0049	/J	0.29		1.3		0.11		0.24		1.1	
Pyrene	mg/kg	30	0.078		0.19		0.0026	/Jb	3.8		0.0061		0.27		1.4		0.15		0.35		1	
D2216																						
Percent Moisture	%	-	18.		14.		15.		NT		NT		24.		20.		12.		29.		20.	

[1] Screening Levels for area outside of the freshwater seep zone and comprise the most stringent of the following cleanup levels: (1) human health residential, (2) ecological special status species, (3) protection of groundwater at drinking water levels (distance between petroleum and groundwater is less than 5 ft). For metals, serpentinite background is selected if it is greater than the most stringent of human health and ecological cleanup levels.

*	Screening level for sum of alpha and gamma chlordane.
mg/kg	Milligrams per kilogram.
ND(0.029)	Not detected at reporting limit indicated in parentheses.
NT	Not tested.
☐	Results outlined by a box indicate detected concentrations exceed screening levels.

The analytical data presented on this table are preliminary and have not undergone Level III data validation.

J	Estimated value
b	High response observed for analyte in initial or continuing calibration verification; analyte was not detected above the reporting limit in the associated sample

Table 2a. Phase 1 Soil Sample Analytical Results
Baker Beach Disturbed Areas

	Station Number:		BB2ATP414		BB2ATP416		BB2ATP416		BB2ATP416		BB2ATP418		BB2ATP418		BB2ATP419		BB2ATP419		BB2SB111		BB2SB111	
	Sample Date:	Human Health	12/11/06		12/11/06		12/11/06		12/11/06		12/11/06		12/11/06		12/11/06		12/11/06		12/12/06		12/12/06	
	Sample Depth (feet):	Residential / Ecological	1.5		0		1.5		2		0		1		0		1.2		0		1	
	Sample Number:	Special-Status	BB2ATP414[1.5]		BB2ATP416[0]		BB2ATP416[1.5]		DUP121106		BB2ATP418[0]		BB2ATP418[1]		BB2ATP419[0]		BB2ATP419[1.2]		BB2SB111[0]		BB2SB111[1]	
	Lab Batch:	Serpentinite Soil	191394		191442		191442		191442		191442		191442		191442		191442		191442		191442	
Test Method/Analyte Name	Units	Screening Levels	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
6010																						
Antimony	mg/kg	5	NT		NT		NT		NT		NT		NT		NT		NT		1.6	/J	1.7	/J
Arsenic	mg/kg	5.4	NT		NT		NT		NT		NT		NT		NT		NT		2.7		3.6	
Barium	mg/kg	320	NT		NT		NT		NT		NT		NT		NT		NT		360.		470.	
Beryllium	mg/kg	10	NT		NT		NT		NT		NT		NT		NT		NT		0.43		0.58	
Cadmium	mg/kg	1.9	NT		NT		NT		NT		NT		NT		NT		NT		ND(0.27)		ND(0.3)	
Chromium	mg/kg	1700	NT		NT		NT		NT		NT		NT		NT		NT		13.		33.	
Cobalt	mg/kg	170	NT		NT		NT		NT		NT		NT		NT		NT		7.7		14.	
Copper	mg/kg	85	NT		NT		NT		NT		NT		NT		NT		NT		110.		140.	
Lead	mg/kg	160	NT		NT		NT		NT		NT		NT		NT		NT		9.4		12.	
Molybdenum	mg/kg	12	NT		NT		NT		NT		NT		NT		NT		NT		0.10	/J	0.31	/J
Nickel	mg/kg	4500	NT		NT		NT		NT		NT		NT		NT		NT		19.		38.	
Selenium	mg/kg	0.5	NT		NT		NT		NT		NT		NT		NT		NT		0.60		1.1	
Silver	mg/kg	2	NT		NT		NT		NT		NT		NT		NT		NT		ND(0.27)		3.1	
Vanadium	mg/kg	74	NT		NT		NT		NT		NT		NT		NT		NT		31.		45.	
Zinc	mg/kg	160	NT		NT		NT		NT		NT		NT		NT		NT		31.		42.	
7471A																						
Mercury	mg/kg	0.4	NT		NT		NT		NT		NT		NT		NT		NT		0.012	/J	0.027	
8081A																						
4,4'-DDE	mg/kg	0.098	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
4,4'-DDT	mg/kg	0.0082	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
alpha-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Dieldrin	mg/kg	0.03	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
gamma-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Heptachlor	mg/kg	0.017	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
8270SIM																						
2-Methylnaphthalene	mg/kg	30	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Acenaphthene	mg/kg	30	0.00078	/J	ND(0.03)		0.05	/J	0.0062	/J	ND(0.14)		ND(0.0057)		ND(0.054)		ND(0.0059)		ND(0.011)		ND(0.006)	
Acenaphthylene	mg/kg	30	0.01		0.014	/J	0.5		0.092		0.054	/J	ND(0.0057)		ND(0.054)		ND(0.0059)		ND(0.011)		ND(0.006)	
Anthracene	mg/kg	30	0.0056	/J	ND(0.03)		0.76		0.058		0.056	/J	ND(0.0057)		ND(0.054)		ND(0.0059)		ND(0.011)		ND(0.006)	
Benzo(a)anthracene	mg/kg	0.27	0.025		0.023	/J	1.6		0.17		0.18		0.0055	/J	ND(0.054)		0.0029	/J	ND(0.011)		ND(0.006)	
Benzo(a)pyrene	mg/kg	0.027	0.027		0.03	/J	1.4		0.25		0.21		0.0087		ND(0.054)		0.0035	/J	ND(0.011)		ND(0.006)	
Benzo(b)fluoranthene	mg/kg	0.27	0.022		0.032		0.96		0.19		0.19		0.0052	/J	0.0052	/J	0.0028	/J	ND(0.011)		0.00094	/J
Benzo(g,h,i)perylene	mg/kg	30	0.025		0.036		0.81		0.18		0.14	/J	0.0084		ND(0.054)		0.0034	/J	ND(0.011)		0.0015	/J
Benzo(k)fluoranthene	mg/kg	0.27	0.027		0.03	/J	1.3		0.23		0.2		0.006		ND(0.054)		0.0033	/J	ND(0.011)		ND(0.006)	
Chrysene	mg/kg	2.7	0.047		0.059		2		0.34		0.34		0.0059		ND(0.054)		0.0041	/J	0.01	/J	0.0041	/J
Dibenzo(a,h)anthracene	mg/kg	0.078	0.0031	/J	0.012	/J	0.41		0.076		0.057	/J	0.0041	/J	ND(0.054)		0.0012	/J	ND(0.011)		ND(0.006)	
Fluoranthene	mg/kg	30	0.075		0.082		4.7		0.76		0.56		0.0051	/J	ND(0.054)		0.0069		ND(0.011)		0.0014	/J
Fluorene	mg/kg	30	0.0032	/J	0.0057	/J	0.41		0.033		ND(0.14)		ND(0.0057)		ND(0.054)		ND(0.0059)		ND(0.011)		ND(0.006)	
Indeno(1,2,3-cd)pyrene	mg/kg	0.27	0.0095		0.025	/J	0.92		0.19		0.14	/J	0.0081		ND(0.054)		0.0029	/J	ND(0.011)		0.0013	/J
Naphthalene	mg/kg	9	0.0082		0.066		0.13		0.066		0.065	/J	0.0012	/J	ND(0.054)		ND(0.0059)		ND(0.011)		0.0016	/J
Phenanthrene	mg/kg	30	0.086		0.12		4.8		0.81		0.46		0.003	/J	ND(0.054)		0.0036	/J	ND(0.011)		0.0012	/J
Pyrene	mg/kg	30	0.097		0.085		4.6		0.73		0.58		0.0051	/J	0.0082	/J	0.0065		ND(0.011)		0.0015	/J
D2216																						
Percent Moisture	%	-	12.		18.		36.		12.		28.		13.		8.0		15.		9.0		17.	

[1] Screening Levels for area outside of the freshwater seep zone and comprise the most stringent of the following cleanup levels: (1) human health residential, (2) ecological special status species, (3) protection of groundwater at drinking water levels (distance between petroleum and groundwater is less than 5 ft). For metals, serpentinite background is selected if it is greater than the most stringent of human health and ecological cleanup levels.

*	Screening level for sum of alpha and gamma chlordane.
mg/kg	Milligrams per kilogram.
ND(0.029)	Not detected at reporting limit indicated in parentheses.
NT	Not tested.
☐	Results outlined by a box indicate detected concentrations exceed screening levels.

The analytical data presented on this table are preliminary and have not undergone Level III data validation.

J	Estimated value
b	High response observed for analyte in initial or continuing calibration verification; analyte was not detected above the reporting limit in the associated sample

Table 2a. Phase 1 Soil Sample Analytical Results
Baker Beach Disturbed Areas

	Station Number:		BB2SB112		BB2SB112		BB2SB113		BB2SB113		BB2SB114		BB2SB114		BB2SB114		BB2TP110		BB2TP110		BB2TP110	
	Sample Date:	Human Health	12/12/06		12/12/06		12/12/06		12/12/06		12/12/06		12/12/06		12/12/06		12/22/06		12/22/06		12/22/06	
	Sample Depth (feet):	Residential / Ecological	0		1		0		1		0		1		1.5		3		4		9	
	Sample Number:	Special-Status	BB2SB112[0]		BB2SB112[1]		BB2SB113[0]		BB2SB113[1]		BB2SB114[0]		BB2SB114[1]		DUP121206-2		BB2TP110[3.0]		BB2TP110[4.0]		BB2TP110[9.0]	
	Lab Batch:	Serpentinite Soil	191442		191442		191442		191442		191442		191442		191442		191730		191730		191730	
Test Method/Analyte Name	Units	Screening Levels	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
6010																						
Antimony	mg/kg	5	2.7	/J	2.0	/J	1.9	/J	1.8	/J	1.8	/J	1.5	/J	1.8	/J	2.3	/J	ND(3.6)		0.31	/J
Arsenic	mg/kg	5.4	4.2		4.7		5.6		3.8		5.0		8.1		12.		7.2		8.1		12.	
Barium	mg/kg	320	210.		130.		140.		170.		100.		87.		120.		300.		170.		240.	
Beryllium	mg/kg	10	0.40		0.43		0.42		0.42		0.33		0.47		0.63		0.47		0.64		0.91	
Cadmium	mg/kg	1.9	0.62		ND(0.32)		0.075	/J	ND(0.29)		0.21	/J	ND(0.3)		ND(0.3)		0.48		ND(0.31)		ND(0.32)	
Chromium	mg/kg	1700	42.		59.		27.		47.		48.		24.		28.		50.		40.		47.	
Cobalt	mg/kg	170	13.		12.		11.		15.		8.0		7.5		12.		12.		12.		8.7	
Copper	mg/kg	85	82.		19.		47.		77.		29.		31.		46.		60.		30.		35.	
Lead	mg/kg	160	120.		13.		64.		15.		71.		24.		24.		240.		13.		14.	
Molybdenum	mg/kg	12	0.54	/J	0.60	/J	0.41	/J	0.85	/J	0.46	/J	0.41	/J	0.81	/J	0.68	/J	0.54	/J	0.54	/J
Nickel	mg/kg	4500	33.		43.		45.		34.		32.		33.		48.		60.		48.		48.	
Selenium	mg/kg	0.5	0.40		0.62		0.46		0.59		ND(0.34)		0.27	/J	ND(0.3)		ND(0.29)		ND(0.31)		0.72	
Silver	mg/kg	2	ND(0.34)		ND(0.32)		ND(0.32)		ND(0.29)		ND(0.34)		ND(0.3)		ND(0.3)		2.1		0.064	/J	0.14	/J
Vanadium	mg/kg	74	40.		53.		35.		31.		47.		30.		38.		48.		42.		60.	
Zinc	mg/kg	160	160.		37.		64.		22.		90.		61.		88.		390.		59.		59.	
7471A																						
Mercury	mg/kg	0.4	0.16		0.028		0.19		0.015	/J	0.11		0.037		0.11		0.043		0.076		0.039	
8081A																						
4,4'-DDE	mg/kg	0.098	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
4,4'-DDT	mg/kg	0.0082	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
alpha-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Dieldrin	mg/kg	0.03	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
gamma-Chlordane	mg/kg	0.009*	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
Heptachlor	mg/kg	0.017	NT		NT		NT		NT		NT		NT		NT		NT		NT		NT	
8270SIM																						
2-Methylnaphthalene	mg/kg	30	NT		NT		NT		NT		NT		NT		NT		ND(0.0057)		ND(0.006)		ND(0.0063)	
Acenaphthene	mg/kg	30	ND(0.014)		ND(0.0064)		ND(0.063)		ND(0.0058)		ND(0.034)		ND(0.012)		ND(0.006)		ND(0.0057)		ND(0.006)		ND(0.0063)	
Acenaphthylene	mg/kg	30	0.0027	/J	ND(0.0064)		0.0091	/J	ND(0.0058)		ND(0.034)		ND(0.012)		ND(0.006)		ND(0.0057)		ND(0.006)		ND(0.0063)	
Anthracene	mg/kg	30	0.0045	/J	ND(0.0064)		0.042	/J	ND(0.0058)		ND(0.034)		ND(0.012)		ND(0.006)		ND(0.0057)		ND(0.006)		ND(0.0063)	
Benzo(a)anthracene	mg/kg	0.27	0.02		ND(0.0064)		0.072		0.0011	/J	0.011	/J	0.0031	/J	ND(0.006)		ND(0.0057)		ND(0.006)		ND(0.0063)	
Benzo(a)pyrene	mg/kg	0.027	0.014		ND(0.0064)		0.03	/J	ND(0.0058)		0.013	/J	0.0031	/J	ND(0.006)		ND(0.0057)		ND(0.006)		ND(0.0063)	
Benzo(b)fluoranthene	mg/kg	0.27	0.016		0.00085	/J	0.066		0.0007	/J	0.013	/J	0.0033	/J	0.00061	/J	ND(0.0057)		ND(0.006)		ND(0.0063)	
Benzo(g,h,i)perylene	mg/kg	30	0.0098	/J	0.00095	/J	0.03	/J	0.0019	/J	0.018	/J	0.0041	/J	0.00084	/J	ND(0.0057)		ND(0.006)		ND(0.0063)	
Benzo(k)fluoranthene	mg/kg	0.27	0.01	/J	ND(0.0064)		0.055	/J	ND(0.0058)		0.012	/J	0.0025	/J	ND(0.006)		ND(0.0057)		ND(0.006)		ND(0.0063)	
Chrysene	mg/kg	2.7	0.024		ND(0.0064)		0.12		0.0015	/J	0.023	/J	0.0072	/J	ND(0.006)		0.001	/J	ND(0.006)		ND(0.0063)	
Dibenzo(a,h)anthracene	mg/kg	0.078	0.0066	/J	ND(0.0064)		ND(0.063)		ND(0.0058)		0.0073	/J	ND(0.012)		ND(0.006)		ND(0.0057)		ND(0.006)		ND(0.0063)	
Fluoranthene	mg/kg	30	0.036		0.0017	/J	0.27		0.0022	/J	0.028	/J	0.0053	/J	0.0011	/J	0.0013	/J	ND(0.006)		ND(0.0063)	
Fluorene	mg/kg	30	ND(0.014)		ND(0.0064)		ND(0.063)		0.0015	/J	ND(0.034)		ND(0.012)		ND(0.006)		ND(0.0057)		ND(0.006)		ND(0.0063)	
Indeno(1,2,3-cd)pyrene	mg/kg	0.27	0.011	/J	ND(0.0064)		ND(0.063)		ND(0.0058)		0.011	/J	0.0024	/J	ND(0.006)		ND(0.0057)		ND(0.006)		ND(0.0063)	
Naphthalene	mg/kg	9	0.0024	/J	ND(0.0064)		ND(0.063)		0.00088	/J	ND(0.034)		ND(0.012)		ND(0.006)		ND(0.0057)		ND(0.006)		ND(0.0063)	
Phenanthrene	mg/kg	30	0.011	/J	0.00074	/J	0.062	/J	0.00076	/J	0.016	/J	0.003	/J	ND(0.006)		ND(0.0057)		ND(0.006)		ND(0.0063)	
Pyrene	mg/kg	30	0.032		0.0014	/J	0.19		0.0021	/J	0.028	/J	0.0068	/J	0.0011	/J	0.0011	/J	ND(0.006)		ND(0.0063)	
D2216																						
Percent Moisture	%	-	27.		22.		21.		14.		27.		16.		17.		13.		17.		22.	

[1] Screening Levels for area outside of the freshwater seep zone and comprise the most stringent of the following cleanup levels: (1) human health residential, (2) ecological special status species, (3) protection of groundwater at drinking water levels (distance between petroleum and groundwater is less than 5 ft). For metals, serpentinite background is selected if it is greater than the most stringent of human health and ecological cleanup levels.

*	Screening level for sum of alpha and gamma chlordane.
mg/kg	Milligrams per kilogram.
ND(0.029)	Not detected at reporting limit indicated in parentheses.
NT	Not tested.
☐	Results outlined by a box indicate detected concentrations exceed screening levels.

The analytical data presented on this table are preliminary and have not undergone Level III data validation.

J	Estimated value
b	High response observed for analyte in initial or continuing calibration verification; analyte was not detected above the reporting limit in the associated sample

Checked

Approved MJH

Table 2b. Phase 1 Soil Sample Analytical Results
Merchant Road Fill Site

	Station Number:		MRFSSB116		MRFSSB116		MRFSTP114		MRFSTP114		MRFSTP115		MRFSTP115		MRFSTP117		MRFSTP117		MRFSTP117	
	Sample Date:	Human Health	12/22/06		12/22/06		12/21/06		12/21/06		12/21/06		12/21/06		12/21/06		12/21/06		12/21/06	
	Sample Depth (feet):	Residential / Ecological	2		5		1		3		1		2.5		2		2		3.5	
	Sample Number:	Buffer Zone	MRFSSB116[2.0]		MRFSSB116[5.0]		MRFSTP114[1.0]		MRFSTP114[3.0]		MRFSTP115[1.0]		MRFSTP115[2.5]		DUP122106		MRFSTP117[2.0]		MRFSTP117[3.5]	
	Lab Batch:	Serpentinite (bck)[1]	191730		191730		191683		191683		191683		191683		191683		191683		191683	
Test Method/Analyte Name	Units	Screening Levels	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
6010																				
Antimony	mg/kg	5	0.45	/J	0.15	/J	0.29	/J	ND(3.4)		0.14	/J	ND(3.3)		ND(3.4)		ND(3.4)		ND(3.3)	
Arsenic	mg/kg	5.4	2.7		5.1		7.3		5.3		6.5		4.6		4.6		5.7		4.1	
Barium	mg/kg	500	190.		75.		290.		110.		260.		62.		68.		180.		140.	
Beryllium	mg/kg	10	0.28		0.21		0.36		0.38		0.29		0.28		0.30		0.30		0.29	
Cadmium	mg/kg	1.9	0.26	/J	ND(0.3)		0.74		0.05	/J	0.50		0.071	/J	0.058	/J	0.042	/J	0.29	
Chromium	mg/kg	1700	51.		190.		93.		140.		89.		150.		89.		99.		95.	
Cobalt	mg/kg	170	9.5		36.		33.		22.		33.		22.		11.		6.8		16.	
Copper	mg/kg	120	55.		12.		41.		21.		24.		15.		20.		21.		24.	
Lead	mg/kg	300	120.		2.8		240.		5.7		220.		4.3		4.7		4.7		4.1	
Molybdenum	mg/kg	300	0.30	/J	0.14	/J	1.3		0.48	/J	0.69	/J	0.26	/J	0.35	/J	0.41	/J	0.33	/J
Nickel	mg/kg	4500	42.		310.		75.		170.		53.		190.		67.		60.		180.	
Selenium	mg/kg	1.1	0.19	/J	0.46		0.30	/J	ND(0.28)		2.5		ND(0.27)		ND(0.28)		ND(0.28)		0.45	
Silver	mg/kg	2	0.76		0.14	/J	3.9		0.21	/J	3.3		0.18	/J	0.20	/J	0.21	/J	0.18	/J
Vanadium	mg/kg	74	44.		58.		79.		75.		86.		63.		56.		58.		51.	
Zinc	mg/kg	160	120.		26.		240.		37.		160.		29.		36.		39.		32.	
7471A																				
Mercury	mg/kg	1.6	0.08		0.066		0.46		0.054		0.14		0.04		0.045		0.072		0.045	
8270SIM																				
2-Methylnaphthalene	mg/kg	40	0.33		0.0019	/J	0.0016	/J	ND(0.0057)		0.0019	/J	ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Acenaphthene	mg/kg	40	0.016	/J	ND(0.0058)		0.0021	/J	ND(0.0057)		ND(0.0059)		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Acenaphthylene	mg/kg	40	0.095		0.0023	/J	0.0016	/J	ND(0.0057)		0.0038	/J	ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Anthracene	mg/kg	40	0.043		0.0019	/J	0.0036	/J	ND(0.0057)		0.0025	/J	ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Benzo(a)anthracene	mg/kg	0.27	0.12		0.0054	/J	0.013		ND(0.0057)		0.01		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Benzo(a)pyrene	mg/kg	0.027	0.22		0.0064		0.014		ND(0.0057)		0.014		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Benzo(b)fluoranthene	mg/kg	0.27	0.18		0.0057	/J	0.012		ND(0.0057)		0.012		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Benzo(g,h,i)perylene	mg/kg	40	0.16		0.0051	/J	0.009		ND(0.0057)		0.01		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Benzo(k)fluoranthene	mg/kg	0.27	0.26		0.0074		0.011		ND(0.0057)		0.012		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Chrysene	mg/kg	2.7	0.39		0.011		0.016		ND(0.0057)		0.018		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Dibenzo(a,h)anthracene	mg/kg	0.078	0.049		0.0017	/J	0.008		ND(0.0057)		0.0078		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Fluoranthene	mg/kg	40	0.97		0.025		0.024		ND(0.0057)		0.034		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Fluorene	mg/kg	40	0.074		0.0012	/J	0.0022	/J	ND(0.0057)		0.0015	/J	ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Indeno(1,2,3-cd)pyrene	mg/kg	0.27	0.14		0.0043	/J	0.009		ND(0.0057)		0.011		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Naphthalene	mg/kg	40	0.77		0.0037	/J	0.0018	/J	ND(0.0057)		0.0028	/J	ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Phenanthrene	mg/kg	40	1.7		0.025		0.021		ND(0.0057)		0.032		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
Pyrene	mg/kg	40	0.81		0.019		0.032		ND(0.0057)		0.046		ND(0.0054)		ND(0.0056)		ND(0.0056)		ND(0.0055)	
D2216																				
Percent Moisture	%	-	19.		14.		19.		12.		15.		8.0		11.		11.		9.0	

[1] The screening level comprises the most stringent of the following cleanup levels: (1) human health residential, (2) ecological buffer zone, and (3) protection of groundwater at drinking water levels (distance between petroleum and groundwater is greater than 5 ft). For metals, serpentinite background is selected if it is greater than the most stringent of human health and ecological cleanup levels.

mg/kg	Milligrams per kilogram.
ND(0.029)	Not detected at reporting limit indicated in parentheses.
NT	Not tested.
☐	Results outlined by a box indicate detected concentrations exceed screening levels.
J	Estimated value

The analytical data presented on this table are preliminary and have not undergone Level III data validation.

Checked ______

Approved MJH

Table 2c. Phase 1 Soil Sample Analytical Results - Dioxins and Furans

	Station Number:	**BB1SB117**		**BB1SB117**		**MRFSTP114**	
	Sample Date:	**12/12/06**		**12/12/06**		**12/22/06**	
	Sample Depth (feet):			**1**		**2**	
	Sample Number:	**BB1SB117[0]**		**BB1SB117[1]**		**MRFSTP114[2.0]**	
	Lab Batch:	**191439**		**191439**		**191730**	
Test Method/Analyte Name	Units	Value	Qual	Value	Qual	Value	Qual
8290							
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	ND(0.4)		4.1		ND(0.1)	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxi	pg/g	14.7		6.1		ND(0.1)	
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	ND(0.3)		1.7		ND(0.08)	
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	ND(0.3)		0.90		ND(0.07)	
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	10.3		10.6		0.24	
1,2,3,6,7,8-HxCDD	pg/g	1.5		0.83		ND(0.09)	
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	ND(0.4)		0.74		ND(0.09)	
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	ND(0.3)		0.49		ND(0.09)	
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	ND(0.3)		0.79		ND(0.07)	
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	ND(0.3)		0.69		ND(0.08)	
2,3,7,8-Tetrachlorodibenzofuran	pg/g	0.70		3.3		ND(0.07)	
Heptachlorodibenzofurans(total)	pg/g	7.1		5.9		ND(0.1)	
Heptachlorodibenzo-p-dioxins(total)	pg/g	29.6		12.5		ND(0.1)	
Hexachlorodibenzofurans(total)	pg/g	2.8		8.6		ND(0.07)	
Octachlorodibenzofuran	pg/g	3.5		3.1		ND(0.2)	
Octachlorodibenzo-p-dioxin	pg/g	78.7		30.5		0.43	
Pentachlorodibenzofurans(total)	pg/g	16.7		16.7		ND(0.08)	
Pentachlorodibenzo-p-dioxins(total)	pg/g	0.58		4.8		ND(0.1)	
Tetrachlorodibenzofurans(total)	pg/g	7.9		30.6		ND(0.07)	
Tetrachlorodibenzo-p-dioxins(total)	pg/g	0.69		4.2		ND(0.08)	

pg/g	Picograms per gram.
mg/g	Milligrams per gram.
ND(0.3)	Not detected at reporting limit indicated in parentheses.

Checked cR

Approved MJH

Table 3. 2,3,7,8-Tetrachlordibenzo-p-dioxin (TCDD) Toxic Equivalency (TEQ) Calculations
BB1SB117 and MRFSTP114

Analyte	Toxic Equivalency Factor (TEF) (1) (unitless)	BB1SB117 0 Feet bgs				BB1SB117 1 Foot bgs				MRFSTP114 2 Feet bgs			
		Lab Result pg/g	Notes Quals	TEF Adjusted (2) pg/g	TEF Adjusted mg/kg	Lab Result pg/g	Notes Quals	TEF Adjusted (2) pg/g	TEF Adjusted mg/kg	Lab Result pg/g	Notes Quals	TEF Adjusted (2) pg/g	TEF Adjusted mg/kg
1,2,3,6,7,8-HxCDD	0.1	1.5	J	0.15	1.50E-07	0.83	J	8.30E-02	8.30E-08	0.045	1/2DL	0.0045	4.50E-09
1,2,3,7,8,9-HxCDD	0.1	0.2	1/2DL	0.02	2.00E-08	0.74	EMPC/J	7.40E-02	7.40E-08	0.045	1/2DL	0.0045	4.50E-09
1,2,3,4,6,7,8-HpCDD	0.1	14.7		1.47	1.47E-06	6.1	B	6.10E-01	6.10E-07	0.05	1/2DL	0.005	5.00E-09
1,2,3,4,6,7,8,9-OCDD	0.001	78.7		0.0787	7.87E-08	30.5	B	3.05E-02	3.05E-08	0.43	EMPC/J	0.00043	4.30E-10
2,3,7,8-TCDF	0.1	0.7	J	0.07	7.00E-08	3.3		3.30E-01	3.30E-07	0.035	1/2DL	0.0035	3.50E-09
1,2,3,7,8-PeCDF	0.05	0.15	1/2DL	0.0075	7.50E-09	0.49	EMPC/J	2.45E-02	2.45E-08	0.045	1/2DL	0.00225	2.25E-09
2,3,4,7,8-PeCDF	0.5	0.15	1/2DL	0.075	7.50E-08	0.69	J	3.45E-01	3.45E-07	0.04	1/2DL	0.02	2.00E-08
1,2,3,4,7,8-HxCDF	0.1	0.15	1/2DL	0.015	1.50E-08	1.7	J	1.70E-01	1.70E-07	0.04	1/2DL	0.004	4.00E-09
1,2,3,6,7,8-HxCDF	0.1	0.15	1/2DL	0.015	1.50E-08	0.9	J	9.00E-02	9.00E-08	0.035	1/2DL	0.0035	3.50E-09
2,3,4,6,7,8-HxCDF	0.1	0.15	1/2DL	0.015	1.50E-08	0.79	J	7.90E-02	7.90E-08	0.035	1/2DL	0.0035	3.50E-09
1,2,3,4,6,7,8-HpCDF	0.01	0.2	1/2DL	0.002	2.00E-09	4.1	J	4.10E-02	4.10E-08	0.05	1/2DL	0.0005	5.00E-10
1,2,3,4,5,7,8,9-OCDF	0.001	3.5	EMPC/J	0.0035	3.50E-09	3.1	J	3.10E-03	3.10E-09	0.1	1/2DL	0.0001	1.00E-10
TCDD TEQ				1.92	1.92E-06			1.88	1.88E-06			0.0518	5.18E-08

Residential PRG for 2,3,7,8-TCDD = 3.50E-06(3)

TEF	Toxic equivalency factor
TEQ	Toxic equivalency concentration
pg/g	Picograms per gram
mg/kg	Milligram per kilogram

1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin
1,2,3,7,8,9-HxCDD	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin
1,2,3,4,6,7,8,9-OCDD	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin
2,3,7,8-TCDF	2,3,7,8-Tetrachlordibenzofuran
1,2,3,7,8-PeCDF	1,2,3,7,8-Pentachlorodibenzofuran
2,3,4,7,8-PeCDF	2,3,4,7,8-Pentachlorodibenzofuran
1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-Hexachlorodibenzofuran
1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-Hexachlorodibenzofuran
2,3,4,6,7,8-HxCDF	2,3,4,6,7,8-Hexachlorodibenzofuran
1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-Heptachlorodibenzofuran
1,2,3,4,5,7,8,9-OCDF	1,2,3,4,5,7,8,9-Octachlorodibenzofuran

(1) The TEFs were obtained from *Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds (EPA, 2003).*

(2) The TEF adjusted value is calculated by multipling the laboratory result by the TEF.

(3) Residential PRG for 2,3,7,8-TCDD = 3.50E-06 was calculated using risk equations and assumptions presented in the Development of Presidio-Wide Cleanup Levels for Soil, Sediment, Groundwater, and Surface Water (Cleanup Level Document; EKI, 2002; Revised 2006). The exposure factors used to calculate PRGs for 2,3,7,8-TCDD were those identified in the Cleanup Level Document (*EKI, 2002; Revised 2006*), with the following exceptions: The skin absorption factor for 2,3,7,8-TCDD was obtained from the *Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment)* (*EPA, 2004a*). An updated carcinogenic averaging time based on a lifetime expectancy of 70 years (a carcinogenic averaging time of 25,550 days) was used (*EPA, 1991; DTSC, 1996*). This value is slightly more conservative than the averaging time used in the Cleanup Level Document (EKI, 20002; Revised 2006) of 75 years.

Notes/Qualifiers

B = Analyte was detected in the laboratory method blank .
EMPC = Estimated maximum possible concentration.
J = Concentration is an estimated value.
1/2DL = Value entered is one half of the detection limit; the congener was not detected.

Checked ______
Approved: MOH

EXPLANATION

🟥	afw – Waste fill; human-placed fill (landfill) associated with dumping of demolition debris and residential waste over the edge of the coastal bluff and limited areas of the Covered Way. Generally defined as including surface observations of concrete, metal, glass, brick, asphalt, roofing slate. May be mixed in a soil matrix of either native (colluvium or beach deposits) or non-native (chert road fill, bedding sand, etc.) May contain Chemicals of Concern (COC) above cleanup levels.
BB1ASB127	Proposed Soil Boring
— — ?	Estimated Limit of PAHs in Soil Exceeding Cleanup Levels
- - - - - ? - - ?	Geologic Contact
▨	Mapped Debris Area - 2006 Additional isolated debris items may be present outside of areas shown.
●	Seeps
+	GPS Reference Location
┼┼┼┼	Landslide Scarps
—	Trails
N40W/12E	Bedding Attitude
N52W/12E	Shear Attitude
N30W/15E	Joint Attitude
BB2ATP101	Test Pit
BBSB101	Soil Boring
BB1PZ100	Piezometer location
Test Pit A	Merchant Road Test Pits
Trench 1	Cultural Resource Trench

SURFACE SOIL SAMPLE RESULTS

- 🟩 No PAH or pesticide screening level exceedances
- 🟨 1 to 5 PAH or pesticide screening level exceedances
- 🟥 6 or more PAH or pesticide screening level exceedances
- ○ Metals screening levels exceedance

DRAWN:	RTT	PROJECT NUMBER:	57255 005115
ENGINEER:		SCALE:	1" : 50'
CHECKED:		APPROVED:	
DATE:	2/2007	DATE:	

MACTEC

0 50 100 Feet

THE PRESIDIO TRUST

Proposed Phase 2 Soil Sample Locations and Phase 1 Samples
Containing PCOCs at Concentrations Exceeding Screening Levels -
Surface Samples
Baker Beach Disturbed Areas 1, 1A, 2, 2A and
Merchant Road Fill Site
Presidio of San Francisco, California

FIGURE

1

ProposedBorings.mxd -4/11/07

PACIFIC OCEAN
N
W
E
S
BBDA-1A
BBDA-1
BBDA-2A
BBDA-2
Battery Cranston
Battery Marcus Miller 1661
Battery Marcus Miller
Battery Boutelle
Battery Godfrey
CONCRETE BLOCKS
CONCRETE STRUCTURE
SCATTERED BRICK FRAGMENTS
SEEP ZONE
BARBETTE EXCAVATION
MAGAZINE 21
MAGAZINE 21 EXCAVATION
FORMER INCINERATOR
MAGAZINE 22
MAGAZINE 23
MAGAZINE 27
MAGAZINE 28
MAGAZINE 29
FORMER SHOP SALVAGE
FORMER METAL DISPOSAL AREA
Concrete Structure
GGBTD OFFICES
UNDESIGNATED FILL AREA
Infiltration Test Location
Merchant Road
Lincoln Boulevard
Storey Avenue
Boundary of Area of Potential Effect (APE)
Test Pit B
Test Pit C
Trench 1
Trench 2
Trench 3
Trench 4
Trench 5
Trench A
Trench B
Trench C
Trench D
EXPLANATION
Artificially Deposited Fill
afh – Historic fill; human-placed fill associated with the construction of the Earthen Barbette Batteries or Endicott Period Batteries. Generally defined as including the areas of “superior slope” and “traverses” of the earlier Barbettes, as well as beneath the sod placed on the shoreside surface of the Endicott Batteries. For clarity, it also includes the concrete Endicott Period bunkers. May contain cultural artifacts and select earth materials of significance
afh1 – Historic fill; in place.
afh2 – Historic fill; disturbed.
afw – Waste fill; human-placed fill (landfill) associated with dumping of demolition debris and residential waste over the edge of the coastal bluff and limited areas of the Covered Way. Generally defined as including surface observations of concrete, metal, glass, brick, asphalt, roofing slate. May be mixed in a soil matrix of either native (colluvium or beach deposits) or non-native (chert road fill, bedding sand, etc.) May contain Chemicals of Concern (COC) above cleanup levels.
afo – Other fill; human-placed fill of uncertain origin. Generally found outside historic boundaries of the Earthen Barbette Batteries or Endicott Period Batteries boundaries. Also contains engineered fill placed for roads within the Area of Potential Effect (APE).
afo1 – Other fill; human placed fill with construction debris.
Quaternary Deposits
Qls – Landslides deposits; where exposed may contain rafts of afw and/or afo. Characterized as slump or rotational on the lower slopes; as talus or localized rockfall at base of Serpentinite cliffs.
Qcol – Native Soils, includes residual bedrock soils and Colma Formation, consisting of unconsolidated clean sand and clayey sand deposits. Also includes colluvium - native slope-wash materials consisting of clay, sandy clay and gravelly sand with some cobbles or boulders.
Qb – Beach Deposits; found exclusively in tidal zone, contains variable afw, as well as driftwood and trash.
Bedrock
Franciscan Assemblege
KJm – Melange; contains hetereogenous mixture of greenstone, greywacke sandstone and chert in a sheared soil-like matrix.
KJss and KJsh – sandstone and shale respectively; Large, coherent blocks of greywacke sandstone and silaceous, thinly bedded shale
Sp – Serpentinite; massive, with other ultamafic and metamorphic rocks included schist, amphibolite, and meta-greenstone.
Geologic Contact
G G' Cross-section Locations
Seeps
Landslide Scarps
N40W/12E Bedding Attitude
N52W/12E Shear Attitude
N30W/15E Joint Attitude
BB2ATP101 Test Pit
BBSB101 Soil Boring
BB1PZ100 Piezometer location
Test Pit A Merchant Road Test Pits
Trench 1 Cultural Resource Trench
Mapped Debris Area - 2006 Additional isolated debris items may be present outside of areas shown.
GPS Reference Location
SOIL SAMPLE RESULTS AT DEPTHS OF ONE FOOT AND GREATER
No PAH or pesticide screening level exceedances
1 to 5 PAH or pesticide screening level exceedances
6 or more PAH or pesticide screening level exceedances
Metals screening levels exceedance
0 50 100 Feet

DRAWN:	RTT	PROJECT NUMBER:	57255 005115
ENGINEER:	WHG	SCALE:	1" : 50'
CHECKED:	JHD	APPROVED:	MJH
DATE:	03/2006	DATE:	

MACTEC

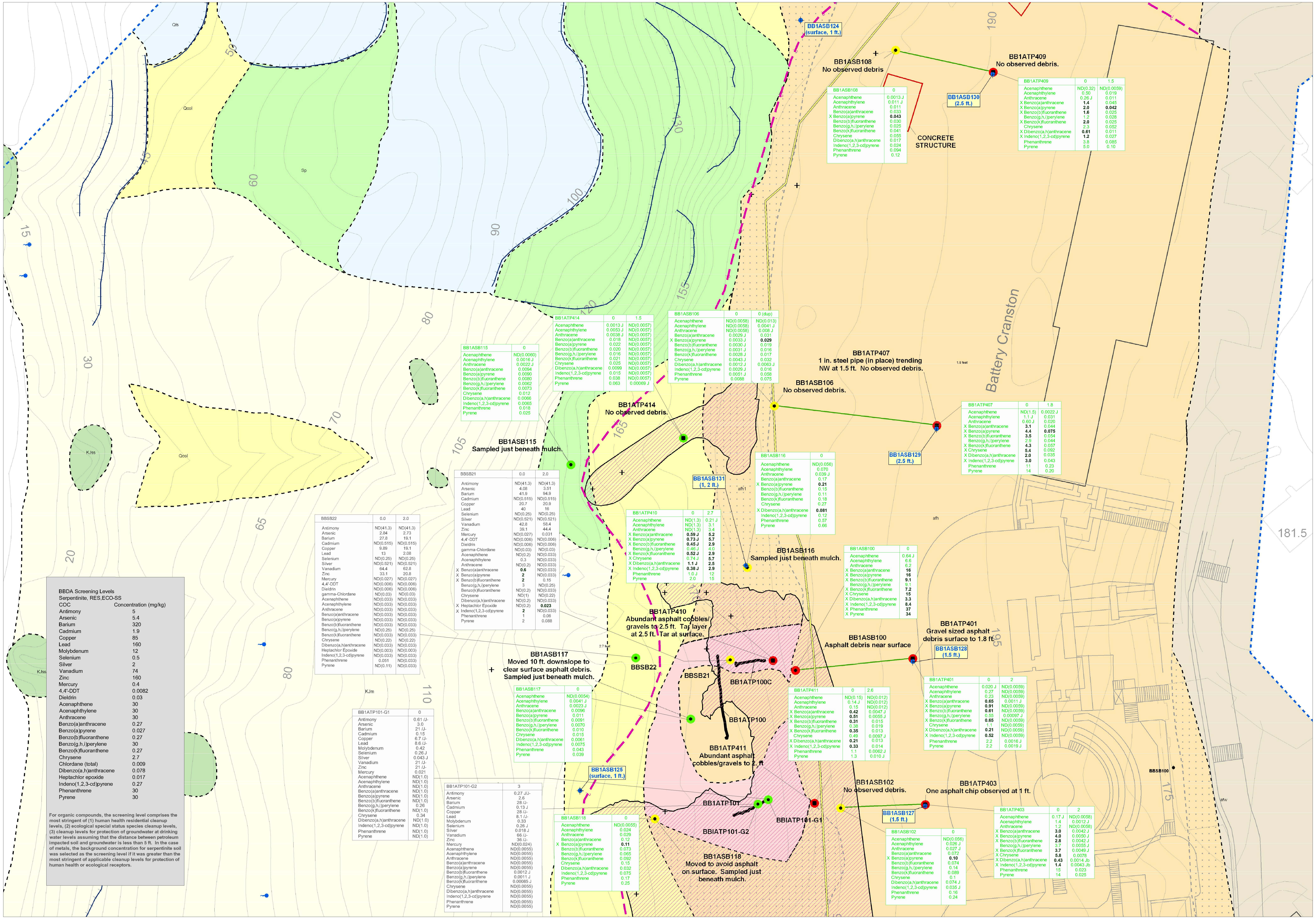
THE PRESIDIO TRUST

Phase 1 Samples Containing PCOCs at Concentrations
Exceeding Screening Levels, One-Foot Depth and Greater
Baker Beach Disturbed Areas 1, 1A, 2, 2A and
Merchant Road Fill Site
Presidio of San Francisco, California

FIGURE

2

Soil-results-depth.mxd - 4/11/07


Qls
Qcol
Sp
KJss
Qcol
KJm
KJss
afh1
afh
afw
15
20
30
45
50
60
65
70
80
80
90
100
105
110
120
130
155
165
170
175
181.5
190
195
Battery Cranston
1.8 feet
2.7 feet
BBSB100
BB1ASB124 (surface, 1 ft.)
BB1ASB108 No observed debris
CONCRETE STRUCTURE
BB1ASB130 (2.5 ft.)
BB1ATP409 No observed debris.
BB1ATP407 1 in. steel pipe (in place) trending NW at 1.5 ft. No observed debris.
BB1ASB106 No observed debris.
BB1ASB129 (2.5 ft.)
BB1ATP414 No observed debris.
BB1ASB115 Sampled just beneath mulch.
BB1ASB131 (1, 2 ft.)
BB1ASB116 Sampled just beneath mulch.
BB1ATP410 Abundant asphalt cobbles/ gravels to 2.5 ft. Tar layer at 2.5 ft. Tar at surface.
BB1ASB100 Asphalt debris near surface
BB1ATP401 Gravel sized asphalt debris surface to 1.8 ft.
BB1ASB128 (1.5 ft.)
BB1ASB117 Moved 10 ft. downslope to clear surface asphalt debris. Sampled just beneath mulch.
BBSB22
BBSB21
BB1ATP100C
BB1ATP100
BB1ATP411 Abundant asphalt cobbles/gravels to 2. ft
BB1ASB125 (surface, 1 ft.)
BB1ATP101
BBIATP101-G1
BBIATP101-G2
BB1ASB118 Moved to avoid asphalt on surface. Sampled just beneath mulch.
BB1ASB102 No observed debris.
BB1ASB127 (1.5 ft.)
BB1ATP403 One asphalt chip observed at 1 ft.

BB1ASB108	0
Acenaphthene	0.0013 J
Acenaphthylene	0.011 J
Anthracene	0.011
Benzo(a)anthracene	0.033
X Benzo(a)pyrene	**0.043**
Benzo(b)fluoranthene	0.030
Benzo(g,h,i)perylene	0.025
Benzo(k)fluoranthene	0.041
Chrysene	0.055
Dibenzo(a,h)anthracene	0.017
Indeno(1,2,3-cd)pyrene	0.024
Phenanthrene	0.094
Pyrene	0.12

BB1ATP409	0	1.5
Acenaphthene	ND(0.32)	ND(0.0059)
Acenaphthylene	0.50	0.019
Anthracene	0.26 J	0.011
X Benzo(a)anthracene	**1.4**	0.045
X Benzo(a)pyrene	**2.0**	**0.042**
X Benzo(b)fluoranthene	**1.6**	0.025
Benzo(g,h,i)perylene	1.2	0.028
X Benzo(k)fluoranthene	**2.0**	0.025
Chrysene	2.3	0.052
X Dibenzo(a,h)anthracene	**0.61**	0.011
X Indeno(1,2,3-cd)pyrene	**1.2**	0.027
Phenanthrene	3.8	0.085
Pyrene	5.0	0.10

BB1ASB115	0
Acenaphthene	ND(0.0060)
Acenaphthylene	0.0016 J
Anthracene	0.0022 J
Benzo(a)anthracene	0.0094
Benzo(a)pyrene	0.0090
Benzo(b)fluoranthene	0.0080
Benzo(g,h,i)perylene	0.0062
Benzo(k)fluoranthene	0.0073
Chrysene	0.012
Dibenzo(a,h)anthracene	0.0066
Indeno(1,2,3-cd)pyrene	0.0065
Phenanthrene	0.018
Pyrene	0.025

BB1ATP414	0	1.5
Acenaphthene	0.0013 J	ND(0.0057)
Acenaphthylene	0.0053 J	ND(0.0057)
Anthracene	0.0038 J	ND(0.0057)
Benzo(a)anthracene	0.018	ND(0.0057)
Benzo(a)pyrene	0.022	ND(0.0057)
Benzo(b)fluoranthene	0.020	ND(0.0057)
Benzo(g,h,i)perylene	0.016	ND(0.0057)
Benzo(k)fluoranthene	0.021	ND(0.0057)
Chrysene	0.025	ND(0.0057)
Dibenzo(a,h)anthracene	0.0099	ND(0.0057)
Indeno(1,2,3-cd)pyrene	0.015	ND(0.0057)
Phenanthrene	0.038	ND(0.0057)
Pyrene	0.063	0.00069 J

BB1ASB106	0	0 (dup)
Acenaphthene	ND(0.0058)	ND(0.013)
Acenaphthylene	ND(0.0058)	0.0041 J
Anthracene	ND(0.0058)	0.008 J
Benzo(a)anthracene	0.0029 J	0.031
X Benzo(a)pyrene	0.0033 J	**0.029**
Benzo(b)fluoranthene	0.0030 J	0.019
Benzo(g,h,i)perylene	0.0031 J	0.016
Benzo(k)fluoranthene	0.0028 J	0.017
Chrysene	0.0043 J	0.032
Dibenzo(a,h)anthracene	0.0012 J	0.0063 J
Indeno(1,2,3-cd)pyrene	0.0029 J	0.016
Phenanthrene	0.0051 J	0.058
Pyrene	0.0088	0.075

BB1ATP407	0	1.8
Acenaphthene	ND(1.5)	0.0022 J
Acenaphthylene	1.1 J	0.031
Anthracene	0.60 J	0.020
X Benzo(a)anthracene	**3.1**	0.044
X Benzo(a)pyrene	**4.4**	**0.075**
X Benzo(b)fluoranthene	**3.5**	0.054
Benzo(g,h,i)perylene	2.9	0.044
X Benzo(k)fluoranthene	**4.3**	0.057
X Chrysene	**5.4**	0.092
X Dibenzo(a,h)anthracene	**2.0**	0.035
X Indeno(1,2,3-cd)pyrene	**3.0**	0.043
Phenanthrene	11	0.23
Pyrene	14	0.20

BB1ASB116	0
Acenaphthene	ND(0.056)
Acenaphthylene	0.070
Anthracene	0.039 J
Benzo(a)anthracene	0.17
X Benzo(a)pyrene	**0.21**
Benzo(b)fluoranthene	0.15
Benzo(g,h,i)perylene	0.11
Benzo(k)fluoranthene	0.18
Chrysene	0.27
X Dibenzo(a,h)anthracene	**0.081**
Indeno(1,2,3-cd)pyrene	0.12
Phenanthrene	0.57
Pyrene	0.66

BBSB22	0.0	2.0
Antimony	ND(41.3)	ND(41.3)
Arsenic	2.84	2.73
Barium	27.8	19.1
Cadmium	ND(0.515)	ND(0.515)
Copper	9.89	19.1
Lead	13	2.08
Selenium	ND(0.25)	ND(0.25)
Silver	ND(0.521)	ND(0.521)
Vanadium	64.4	62.8
Zinc	33.1	20.8
Mercury	ND(0.027)	ND(0.027)
4,4'-DDT	ND(0.006)	ND(0.006)
Dieldrin	ND(0.006)	ND(0.006)
gamma-Chlordane	ND(0.03)	ND(0.03)
Acenaphthene	ND(0.033)	ND(0.033)
Acenaphthylene	ND(0.033)	ND(0.033)
Anthracene	ND(0.033)	ND(0.033)
Benzo(a)anthracene	ND(0.033)	ND(0.033)
Benzo(a)pyrene	ND(0.033)	ND(0.033)
Benzo(b)fluoranthene	ND(0.033)	ND(0.033)
Benzo(g,h,i)perylene	ND(0.25)	ND(0.25)
Benzo(k)fluoranthene	ND(0.033)	ND(0.033)
Chrysene	ND(0.22)	ND(0.22)
Dibenzo(a,h)anthracene	ND(0.033)	ND(0.033)
Heptachlor Epoxide	ND(0.003)	ND(0.003)
Indeno(1,2,3-cd)pyrene	ND(0.033)	ND(0.033)
Phenanthrene	0.051	ND(0.033)
Pyrene	ND(0.11)	ND(0.033)

BBSB21	0.0	2.0
Antimony	ND(41.3)	ND(41.3)
Arsenic	4.08	3.51
Barium	41.9	94.9
Cadmium	ND(0.515)	ND(0.515)
Copper	20.7	20.9
Lead	40	16
Selenium	ND(0.25)	ND(0.25)
Silver	ND(0.521)	ND(0.521)
Vanadium	42.8	58.4
Zinc	39.1	44.4
Mercury	ND(0.027)	0.031
4,4'-DDT	ND(0.006)	ND(0.006)
Dieldrin	ND(0.006)	ND(0.006)
gamma-Chlordane	ND(0.03)	ND(0.03)
Acenaphthene	ND(0.2)	ND(0.033)
Acenaphthylene	0.3	ND(0.033)
Anthracene	ND(0.2)	ND(0.033)
X Benzo(a)anthracene	**0.6**	ND(0.033)
X Benzo(a)pyrene	**2**	ND(0.033)
X Benzo(b)fluoranthene	**2**	0.15
Benzo(g,h,i)perylene	3	ND(0.25)
Benzo(k)fluoranthene	ND(0.2)	ND(0.033)
Chrysene	ND(1)	ND(0.22)
Dibenzo(a,h)anthracene	ND(0.2)	ND(0.033)
X Heptachlor Epoxide	ND(0.2)	**0.023**
X Indeno(1,2,3-cd)pyrene	**2**	ND(0.033)
Phenanthrene	1	0.06
Pyrene	2	0.088

BB1ATP410	0	2.7
Acenaphthene	ND(1.3)	0.21 J
Acenaphthylene	ND(1.3)	3.1
Anthracene	ND(1.3)	3.4
X Benzo(a)anthracene	**0.59 J**	**5.2**
X Benzo(a)pyrene	**0.73 J**	**5.7**
X Benzo(b)fluoranthene	**0.45 J**	**2.9**
Benzo(g,h,i)perylene	0.46 J	4.0
X Benzo(k)fluoranthene	**0.52 J**	**2.9**
X Chrysene	0.74 J	**5.7**
X Dibenzo(a,h)anthracene	**1.1 J**	**2.5**
X Indeno(1,2,3-cd)pyrene	**0.38 J**	**2.9**
Phenanthrene	1.0 J	12
Pyrene	2.0	15

BB1ASB100	0
Acenaphthene	0.64 J
Acenaphthylene	6.6
Anthracene	6.2
X Benzo(a)anthracene	**16**
X Benzo(a)pyrene	**16**
X Benzo(b)fluoranthene	**9.1**
Benzo(g,h,i)perylene	9.1
X Benzo(k)fluoranthene	**7.2**
X Chrysene	**15**
X Dibenzo(a,h)anthracene	**3.3**
X Indeno(1,2,3-cd)pyrene	**8.4**
X Phenanthrene	**37**
X Pyrene	**34**

BB1ASB117	0
Acenaphthene	ND(0.0054)
Acenaphthylene	0.0041 J
Anthracene	0.0023 J
Benzo(a)anthracene	0.0096
Benzo(a)pyrene	0.011
Benzo(b)fluoranthene	0.0091
Benzo(g,h,i)perylene	0.0070
Benzo(k)fluoranthene	0.010
Chrysene	0.015
Dibenzo(a,h)anthracene	0.0061
Indeno(1,2,3-cd)pyrene	0.0075
Phenanthrene	0.043
Pyrene	0.039

BB1ATP411	0	2.6
Acenaphthene	ND(0.15)	ND(0.012)
Acenaphthylene	0.14 J	ND(0.012)
Anthracene	0.15	ND(0.012)
X Benzo(a)anthracene	**0.42**	0.0047 J
X Benzo(a)pyrene	**0.51**	0.0055 J
X Benzo(b)fluoranthene	**0.31**	0.015
Benzo(g,h,i)perylene	0.38	0.019
X Benzo(k)fluoranthene	**0.35**	0.013
Chrysene	0.49	0.0097 J
X Dibenzo(a,h)anthracene	**0.21**	0.013
X Indeno(1,2,3-cd)pyrene	**0.33**	0.014
Phenanthrene	1.1	0.0062 J
Pyrene	1.3	0.010 J

BB1ATP401	0	2
Acenaphthene	0.020 J	ND(0.0059)
Acenaphthylene	0.27	ND(0.0059)
Anthracene	0.23	ND(0.0059)
X Benzo(a)anthracene	**0.65**	0.0011 J
X Benzo(a)pyrene	**0.91**	ND(0.0059)
X Benzo(b)fluoranthene	**0.61**	ND(0.0059)
Benzo(g,h,i)perylene	0.55	0.00097 J
X Benzo(k)fluoranthene	**0.65**	ND(0.0059)
Chrysene	1.1	ND(0.0059)
X Dibenzo(a,h)anthracene	**0.21**	ND(0.0059)
X Indeno(1,2,3-cd)pyrene	**0.52**	ND(0.0059)
Phenanthrene	2.2	0.0016 J
Pyrene	2.2	0.0019 J

BB1ATP101-G1	0
Antimony	0.61 /J-
Arsenic	3.0
Barium	21 /J-
Cadmium	0.15
Copper	6.7 /J-
Lead	8.6 /J-
Molybdenum	0.42
Selenium	0.26 J
Silver	0.043 J
Vanadium	21 /J-
Zinc	21 /J-
Mercury	0.021
Acenaphthene	ND(1.0)
Acenaphthylene	ND(1.0)
Anthracene	ND(1.0)
Benzo(a)anthracene	ND(1.0)
Benzo(a)pyrene	ND(1.0)
Benzo(b)fluoranthene	ND(1.0)
Benzo(g,h,i)perylene	0.26
Benzo(k)fluoranthene	ND(1.0)
Chrysene	0.34
Dibenzo(a,h)anthracene	ND(1.0)
Indeno(1,2,3-cd)pyrene	ND(1.0)
Phenanthrene	ND(1.0)
Pyrene	ND(1.0)

BB1ATP101-G2	3
Antimony	0.27 J/J-
Arsenic	2.6
Barium	28 /J-
Cadmium	0.13 J
Copper	28 /J-
Lead	8.1 /J-
Molybdenum	0.33
Selenium	0.26 J
Silver	0.018 J
Vanadium	66 /J-
Zinc	36 /J-
Mercury	ND(0.024)
Acenaphthene	ND(0.0055)
Acenaphthylene	ND(0.0055)
Anthracene	ND(0.0055)
Benzo(a)anthracene	ND(0.0055)
Benzo(a)pyrene	ND(0.0055)
Benzo(b)fluoranthene	0.0012 J
Benzo(g,h,i)perylene	0.0011 J
Benzo(k)fluoranthene	0.00085 J
Chrysene	ND(0.0055)
Dibenzo(a,h)anthracene	ND(0.0055)
Indeno(1,2,3-cd)pyrene	ND(0.0055)
Phenanthrene	ND(0.0055)
Pyrene	ND(0.0055)

BB1ASB118	0
Acenaphthene	ND(0.0055)
Acenaphthylene	0.024
Anthracene	0.029
Benzo(a)anthracene	0.12
X Benzo(a)pyrene	**0.11**
Benzo(b)fluoranthene	0.073
Benzo(g,h,i)perylene	0.065
Benzo(k)fluoranthene	0.092
Chrysene	0.15
Dibenzo(a,h)anthracene	0.032
Indeno(1,2,3-cd)pyrene	0.075
Phenanthrene	0.17
Pyrene	0.25

BB1ASB102	0
Acenaphthene	ND(0.056)
Acenaphthylene	0.026 J
Anthracene	0.027 J
Benzo(a)anthracene	0.072
X Benzo(a)pyrene	**0.10**
Benzo(b)fluoranthene	0.074
Benzo(g,h,i)perylene	0.14
Benzo(k)fluoranthene	0.089
Chrysene	0.1
Dibenzo(a,h)anthracene	0.074 J
Indeno(1,2,3-cd)pyrene	0.035 J
Phenanthrene	0.16
Pyrene	0.24

BB1ATP403	0	2
Acenaphthene	0.17 J	ND(0.0058)
Acenaphthylene	1.4	0.0012 J
Anthracene	1.2	ND(0.0058)
X Benzo(a)anthracene	**3.0**	0.0042 J
X Benzo(a)pyrene	**4.0**	0.0050 J
X Benzo(b)fluoranthene	**2.8**	0.0042 J
Benzo(g,h,i)perylene	3.7	0.0055 J
X Benzo(k)fluoranthene	**3.7**	0.0049 J
X Chrysene	**5.8**	0.0078
X Dibenzo(a,h)anthracene	**0.43**	0.0014 Jb
X Indeno(1,2,3-cd)pyrene	**1.4**	0.0043 Jb
Phenanthrene	15	0.023
Pyrene	14	0.025

BBDA Screening Levels
Serpentinite, RES,ECO-SS

COC	Concentration (mg/kg)
Antimony	5
Arsenic	5.4
Barium	320
Cadmium	1.9
Copper	85
Lead	160
Molybdenum	12
Selenium	0.5
Silver	2
Vanadium	74
Zinc	160
Mercury	0.4
4,4'-DDT	0.0082
Dieldrin	0.03
Acenaphthene	30
Acenaphthylene	30
Anthracene	30
Benzo(a)anthracene	0.27
Benzo(a)pyrene	0.027
Benzo(b)fluoranthene	0.27
Benzo(g,h,i)perylene	30
Benzo(k)fluoranthene	0.27
Chrysene	2.7
Chlordane (total)	0.009
Dibenzo(a,h)anthracene	0.078
Heptachlor epoxide	0.017
Indeno(1,2,3-cd)pyrene	0.27
Phenanthrene	30
Pyrene	30

For organic compounds, the screening level comprises the most stringent of (1) human health residential cleanup levels, (2) ecological special status species cleanup levels, (3) cleanup levels for protection of groundwater at drinking water levels assuming that the distance between petroleum impacted soil and groundwater is less than 5 ft. In the case of metals, the background concentration for serpentinite soil was selected as the screening level if it was greater than the most stringent of applicable cleanup levels for protection of human health or ecological receptors.

MACTEC

EXPLANATION

	Geologic Contact, dashed where approximate, queried where uncertain.
afh	Battery West Historic Fill: most recent construction and still in place (afh), disturbed on bluff top where stippled (afh1), and disturbed downslope where shaded (ahf2)
afw	Waste Fill
afo	Other Fill
Qls	Landslide Deposits
Qcol	Colma Fm/Native Soils
Sp	Serpentinite
KJm	Melange
KJss/ KJsh	Sandstone Shale
Qb	Beach Deposit
▨	Mapped Debris Area (2006). Additional isolated debris items may be present outside of areas shown.
	Seep
BB2SB102 ●	Boring
BB2TP100	Test Pit
●	Proposed Boring
	Estimated Limit of PAHs in Soil Exceeding Screening Levels
	Trails

Location Identified to have PCOCs above Screening Levels in Soil

🔴	6 or more PAH or pesticide screening level exceedances
🟡	1 to 5 PAH or pesticide screening level exceedances
🟢	No PAH or pesticide screening level exceedances
○	Metals exceedances

Station ID — Top of sample depth in feet — Duplicate sample and depth in feet

BB2ASB100A	1.5 (afw)	1.5 (dup) (afw)
Arsenic	3.6	2.6
Barium	290	240
Cadmium	2.9	2.9

Lithology sampled — Chemical of Concern — Detected concentration in milligram per kilogram

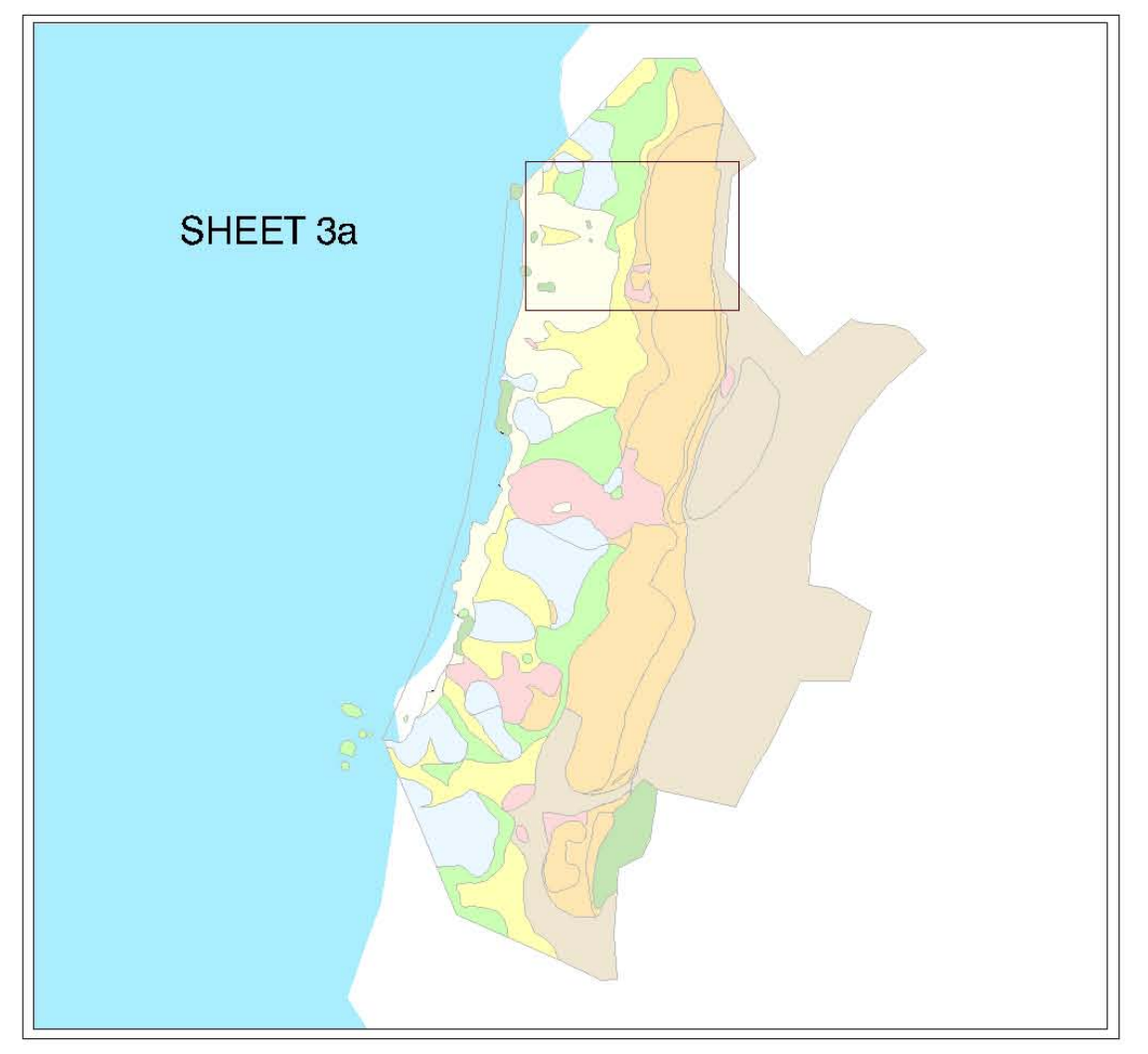
Results shown in **BOLD BLACK** type face exceed applicable screening levels Previous sample results shown in black; 2006 data are shown in green. All December 2006 sample locations presented on this plate were analyzed for PAHs only. Results are shown for only those analytes exceeding screening levels in samples collected from the BBDAs or MRFS.

Notes:

1. All previous boring locations are approximate.
2. Basemap was provided by Presidio Trust.
3. "X" = Indicates the chemical exceeds screening level at this location.
4. ft bgs = feet below ground surface
5. PCOC = Potential Chemical of Concern
6. NA = Not Analyzed
7. "J+" = Estimated High Bias
8. "J-" = Estimated Low Bias
9. "U" = Qualified as No-Detection
10. "J" = Estimated Value
11. ND(0.0078) = not detected at reporting limit indicated in parentheses
12. "RES, ECO-SS" = Residential Human Health and Ecological Special Status Species Cleanup Levels
13. "RES, ECO-Buffer" = Residential Human Health and Ecological Buffer Zone Cleanup Levels
14. PAHs = Polynuclear aromatic hydrocarbons
15. Posted data shown in green type face are preliminary and have not undergone Level III data validation
16. BBDA = Baker Beach Disturbed Area
17. MRFS = Merchant Road Fill Site
18. "b" = High response observed for analyte in initial or continuing calibration verification; analyte was not detected at or above the reporting limit in the associated sample.
19. Samples collected from BB1ATP101 were not analyzed for pesticides.
20. Qualifiers for posted data shown in black type face (pre-December 2006) are listed as lab qualifier/validation qualifier .

N

0 20 40
APPROXIMATE SCALE IN FEET



THE PRESIDIO TRUST

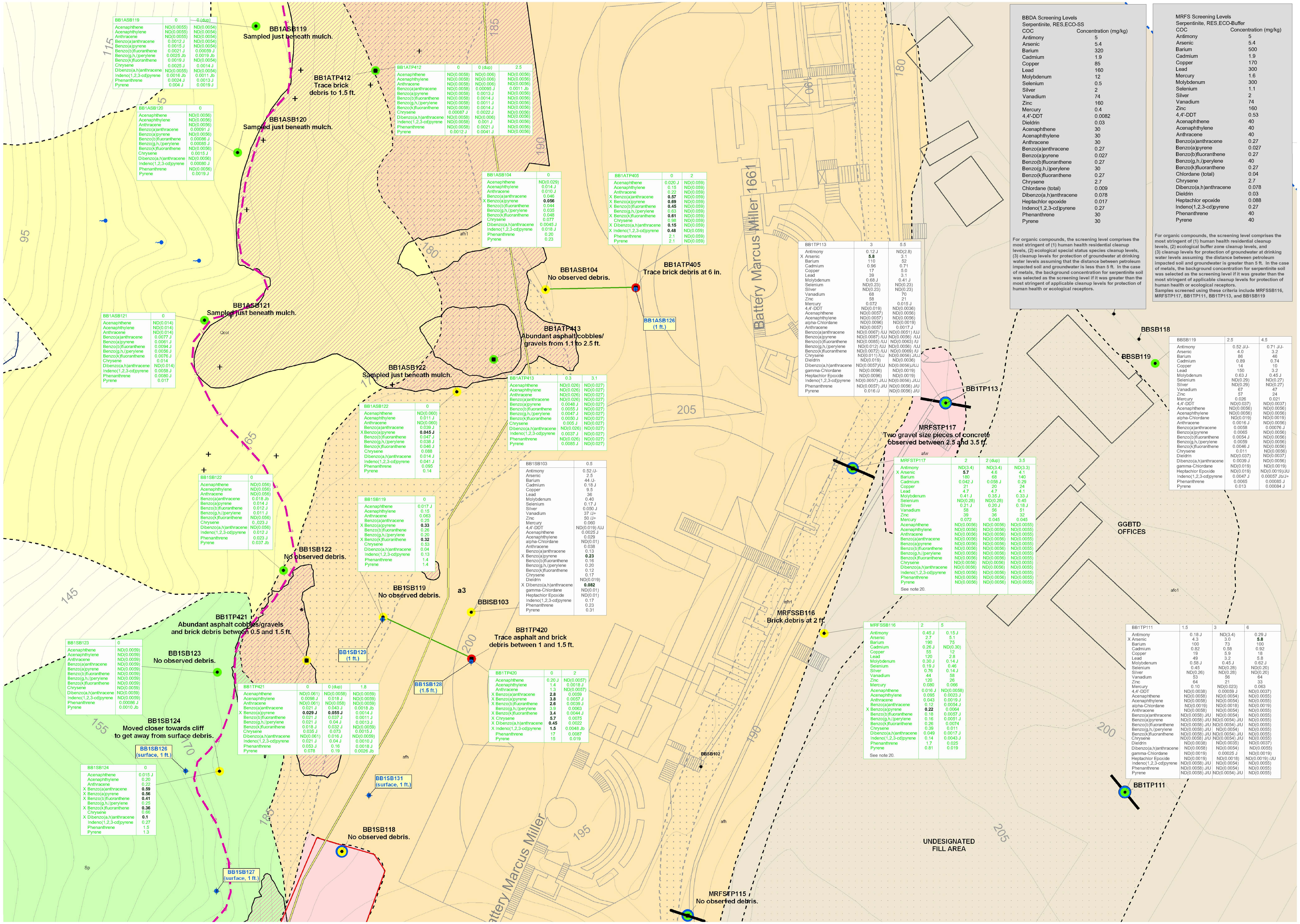
PCOCs in Soil Baker Beach Disturbed Areas Frontal Slope and Bluff Top Areas

CHECKED
APPROVED
DATE

FIGURE 3a

PROJECT NUMBER 57255 005115

57255281.DWG 1.0
20070404.1100



BBDA Screening Levels
Serpentinite, RES,ECO-SS

COC	Concentration (mg/kg)
Antimony	5
Arsenic	5.4
Barium	320
Cadmium	1.9
Copper	85
Lead	160
Molybdenum	12
Selenium	0.5
Silver	2
Vanadium	74
Zinc	160
Mercury	0.4
4,4'-DDT	0.0082
Dieldrin	0.03
Acenaphthene	30
Acenaphthylene	30
Anthracene	30
Benzo(a)anthracene	0.27
Benzo(a)pyrene	0.027
Benzo(b)fluoranthene	0.27
Benzo(g,h,i)perylene	30
Benzo(k)fluoranthene	0.27
Chrysene	2.7
Chlordane (total)	0.009
Dibenzo(a,h)anthracene	0.078
Heptachlor epoxide	0.017
Indeno(1,2,3-cd)pyrene	0.27
Phenanthrene	30
Pyrene	30

For organic compounds, the screening level comprises the most stringent of (1) human health residential cleanup levels, (2) ecological special status species cleanup levels, (3) cleanup levels for protection of groundwater at drinking water levels assuming that the distance between petroleum impacted soil and groundwater is less than 5 ft. In the case of metals, the background concentration for serpentinite soil was selected as the screening level if it was greater than the most stringent of applicable cleanup levels for protection of human health or ecological receptors.

MRFS Screening Levels
Serpentinite, RES,ECO-Buffer

COC	Concentration (mg/kg)
Antimony	5
Arsenic	5.4
Barium	500
Cadmium	1.9
Copper	170
Lead	300
Mercury	1.6
Molybdenum	300
Selenium	1.1
Silver	2
Vanadium	74
Zinc	160
4,4'-DDT	0.53
Acenaphthene	40
Acenaphthylene	40
Anthracene	40
Benzo(a)anthracene	0.27
Benzo(a)pyrene	0.027
Benzo(b)fluoranthene	0.27
Benzo(g,h,i)perylene	40
Benzo(k)fluoranthene	0.27
Chlordane (total)	0.04
Chrysene	2.7
Dibenzo(a,h)anthracene	0.078
Dieldrin	0.03
Heptachlor epoxide	0.088
Indeno(1,2,3-cd)pyrene	0.27
Phenanthrene	40
Pyrene	40

For organic compounds, the screening level comprises the most stringent of (1) human health residential cleanup levels, (2) ecological buffer zone cleanup levels, and (3) cleanup levels for protection of groundwater at drinking water levels assuming the distance between petroleum impacted soil and groundwater is greater than 5 ft. In the case of metals, the background concentration for serpentinite soil was selected as the screening level if it was greater than the most stringent of applicable cleanup levels for protection of human health or ecological receptors.
Samples screened using these criteria include MRFSSB116, MRFSTP117, BB1TP111, BB1TP113, and BB1SB119

MACTEC

EXPLANATION

Geologic Contact, dashed where approximate, queried where uncertain.

afh	Battery West Historic Fill: most recent construction and still in place (afh), disturbed on bluff top where stippled (afh1), and disturbed downslope where shaded (ahf2)
afw	Waste Fill
afo	Other Fill
Qls	Landslide Deposits
Qcol	Colma Fm/Native Soils
Sp	Serpentinite
KJm	Melange
KJss/ KJsh	Sandstone Shale
Qb	Beach Deposit

Mapped Debris Area (2006). Additional isolated debris items may be present outside of areas shown.

Seep

BB2SB102 Boring

BB2TP100 Test Pit

BB1ASB129 (2.5 ft.) Proposed boring and sample depths

Estimated Limit of PAHs in Soil Exceeding Screening Levels

Trails

Location Identified to have PCOCs above Screening Levels in Soil

- 🔴 6 or more PAH or pesticide screening level exceedances
- 🟡 1 to 5 PAH or pesticide screening level exceedances
- 🟢 No PAH or pesticide screening level exceedances
- ○ Metals exceedances

Station ID — Top of sample depth in feet — Duplicate sample and depth in feet

BB2ASB100A	1.5	1.5 (dup)
Arsenic Barium Cadmium	3.6 290 2.9	2.6 240 2.9

Chemical of Concern — Detected concentration in milligram per kilogram

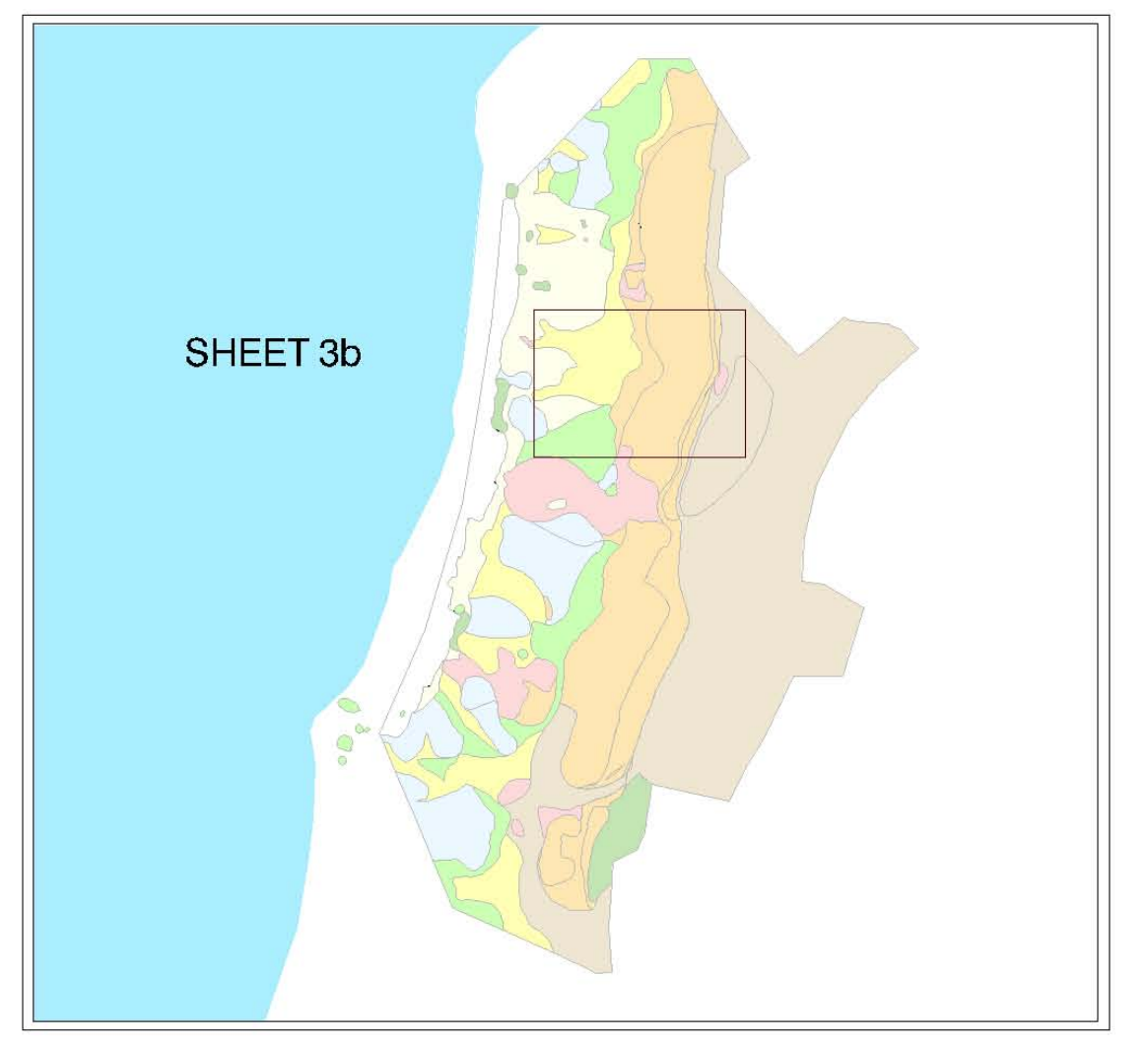
Results shown in **BOLD BLACK** type face exceed applicable screening levels Previous sample results shown in black; 2006 data are shown in green. All December 2006 sample locations presented on this plate were analyzed for PAHs only, except for MRFSSB116 and MRFSTP117. Results are shown for only those analytes exceeding screening levels in samples collected from the BBDAs or MRFS.

Notes:

1. All previous boring locations are approximate.
2. Basemap was provided by Presidio Trust.
3. "X" = Indicates the chemical exceeds screening level at this location.
4. ft bgs = feet below ground surface
5. PCOC = Potential Chemical of Concern
6. NA = Not Analyzed
7. "J+" = Estimated High Bias
8. "J-" = Estimated Low Bias
9. "U" = Qualified as No-Detection
10. "J" = Estimated Value
11. ND(0.0078) = not detected at reporting limit indicated in parentheses
12. "RES, ECO-SS" = Residential Human Health and Ecological Special Status Species Cleanup Levels
13. "RES, ECO-Buffer" = Residential Human Health and Ecological Buffer Zone Cleanup Levels
14. PAHs = Polynuclear aromatic hydrocarbons
15. Posted data shown in green type face are preliminary and have not undergone Level III data validation
16. BBDA = Baker Beach Disturbed Area
17. MRFS = Merchant Road Fill Site
18. "b" = High response observed for analyte in initial or continuing calibration verification; analyte was not detected at or above the reporting limit in the associated sample.
19. Qualifiers for posted data shown in black type face (pre-December 2006) are listed as lab qualifier/validation qualifier.
20. Samples not analyzed for pesticides.

N

0 20 40
APPROXIMATE SCALE IN FEET



THE PRESIDIO TRUST

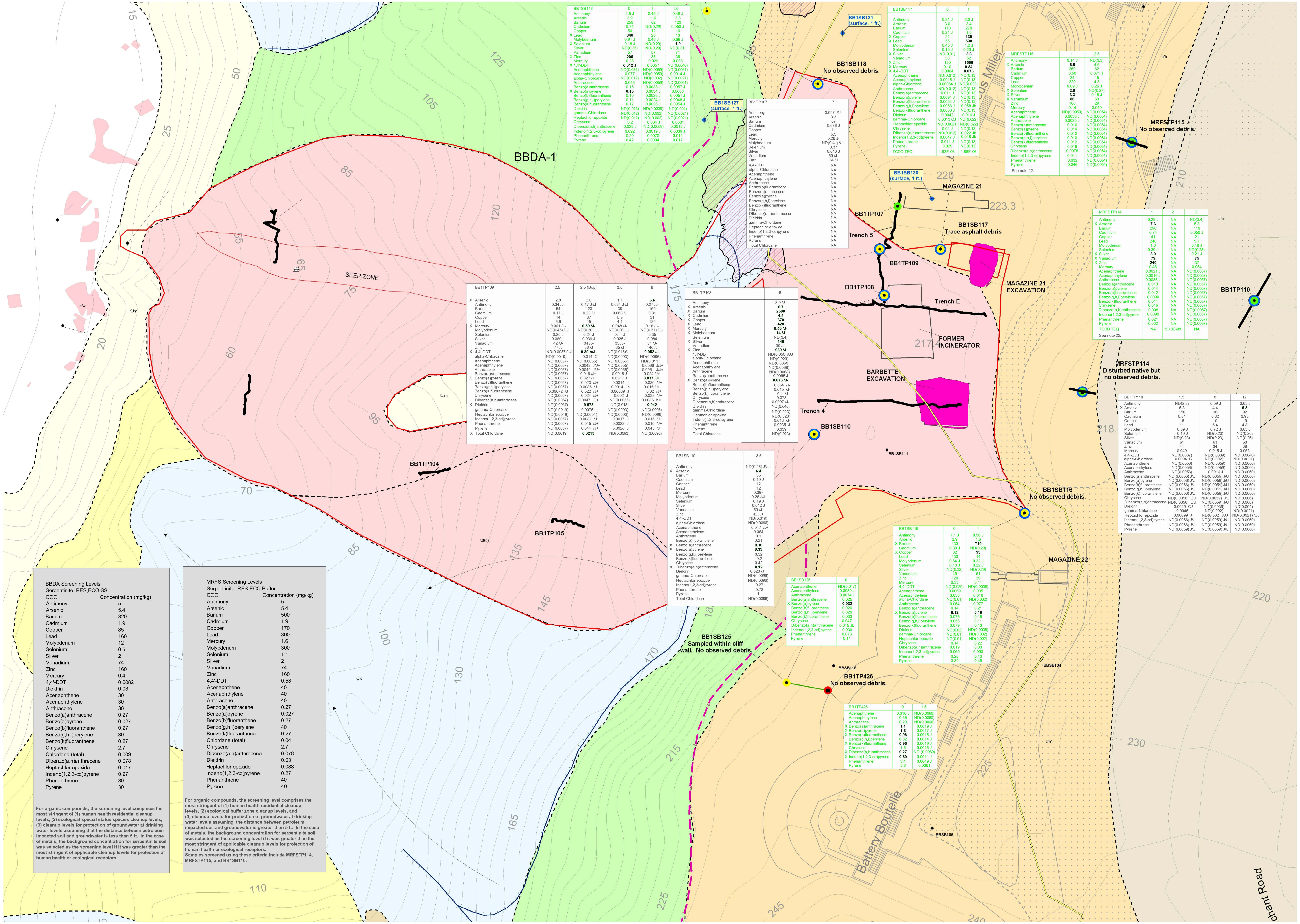
PCOCs in Soil Baker Beach Disturbed Areas Frontal Slope and Bluff Top Areas

CHECKED
APPROVED
DATE

FIGURE 3b

PROJECT NUMBER 57255 005115

57255282.DWG 40.0
20070424.1355



BBDA Screening Levels

Serpentinite, RES,ECO-SS

COC	Concentration (mg/kg)
Antimony	5
Arsenic	5.4
Barium	320
Cadmium	1.9
Copper	85
Lead	160
Molybdenum	12
Selenium	0.5
Silver	2
Vanadium	74
Zinc	160
Mercury	0.4
4,4'-DDT	0.0082
Dieldrin	0.03
Acenaphthene	30
Acenaphthylene	30
Anthracene	30
Benzo(a)anthracene	0.27
Benzo(a)pyrene	0.027
Benzo(b)fluoranthene	0.27
Benzo(g,h,i)perylene	30
Benzo(k)fluoranthene	0.27
Chrysene	2.7
Chlordane (total)	0.009
Dibenzo(a,h)anthracene	0.078
Heptachlor epoxide	0.017
Indeno(1,2,3-cd)pyrene	0.27
Phenanthrene	30
Pyrene	30

For organic compounds, the screening level comprises the most stringent of (1) human health residential cleanup levels, (2) ecological special status species cleanup levels, (3) cleanup levels for protection of groundwater at drinking water levels assuming that the distance between petroleum impacted soil and groundwater is less than 5 ft. In the case of metals, the background concentration for serpentinite soil was selected as the screening level if it was greater than the most stringent of applicable cleanup levels for protection of human health or ecological receptors.

MRFS Screening Levels

Serpentinite, RES,ECO-Buffer

COC	Concentration (mg/kg)
Antimony	5
Arsenic	5.4
Barium	500
Cadmium	1.9
Copper	170
Lead	300
Mercury	1.6
Molybdenum	300
Selenium	1.1
Silver	2
Vanadium	74
Zinc	160
4,4'-DDT	0.53
Acenaphthene	40
Acenaphthylene	40
Anthracene	40
Benzo(a)anthracene	0.27
Benzo(a)pyrene	0.027
Benzo(b)fluoranthene	0.27
Benzo(g,h,i)perylene	40
Benzo(k)fluoranthene	0.27
Chlordane (total)	0.04
Chrysene	2.7
Dibenzo(a,h)anthracene	0.078
Dieldrin	0.03
Heptachlor epoxide	0.088
Indeno(1,2,3-cd)pyrene	0.27
Phenanthrene	40
Pyrene	40

For organic compounds, the screening level comprises the most stringent of (1) human health residential cleanup levels, (2) ecological buffer zone cleanup levels, and (3) cleanup levels for protection of groundwater at drinking water levels assuming the distance between petroleum impacted soil and groundwater is greater than 5 ft. In the case of metals, the background concentration for serpentinite soil was selected as the screening level if it was greater than the most stringent of applicable cleanup levels for protection of human health or ecological receptors.
Samples screened using these criteria include MRFSTP114, MRFSTP115, and BB1SB110.

MACTEC

EXPLANATION

	Geologic Contact, dashed where approximate, queried where uncertain.
afh	Battery West Historic Fill: most recent construction and still in place (afh), disturbed on bluff top where stippled (afh1), and disturbed downslope where shaded (ahf2)
afw	Waste Fill
afo	Other Fill
Qls	Landslide Deposits
Qcol	Colma Fm/Native Soils
Sp	Serpentinite
KJm	Melange
KJss/ KJsh	Sandstone Shale
Qb	Beach Deposit
▨	Mapped Debris Area (2006). Additional isolated debris items may be present outside of areas shown.
●	Seep
BB2SB102 ●	Boring
BB2TP100	Test Pit
BB1ASB129 (2.5 ft.) ●	Proposed boring and sample depths
—?— —	Estimated Limit of PAHs in Soil Exceeding Screening Levels
—	Trails

Location Identified to have PCOCs above Screening Levels in Soil

🔴	6 or more PAH or pesticide screening level exceedances
🟡	1 to 5 PAH or pesticide screening level exceedances
🟢	No PAH or pesticide screening level exceedances
○	Metals exceedances

Station ID — Top of sample depth in feet — Duplicate sample and depth in feet

BB2ASB100A	1.5	1.5 (dup)
Arsenic Barium Cadmium	3.6 290 2.9	2.6 240 2.9

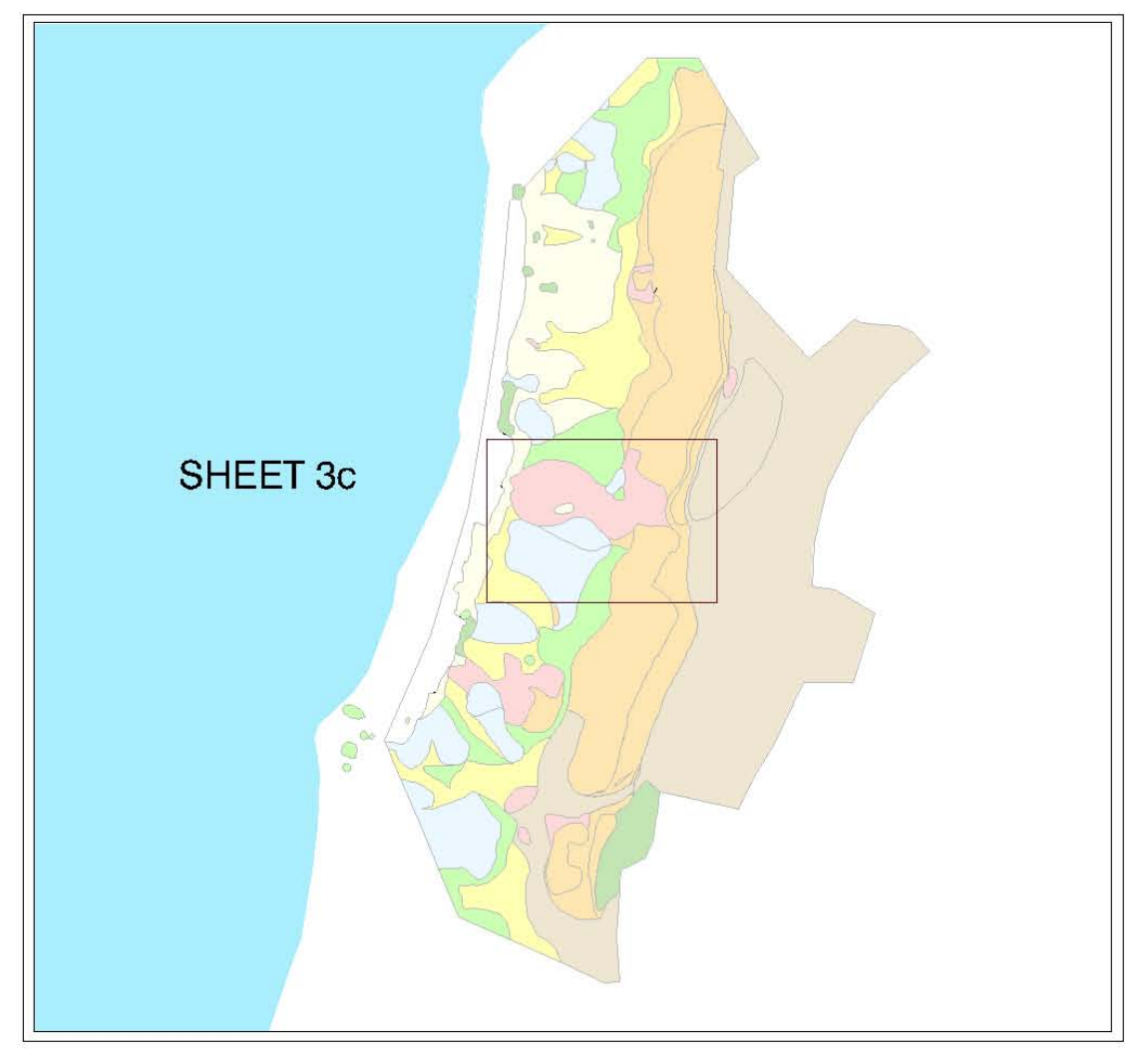
Chemical of Concern — Detected concentration in milligram per kilogram

Results shown in **BOLD BLACK** type face exceed applicable screening levels Previous sample results shown in black; 2006 data are shown in green. December 2006 sample locations BB1SB125 and BB1TP426 were analyzed for PAHs only. Results are shown for only those analytes exceeding screening levels in samples collected from the BBDAs or MRFS.

Notes:

1. All previous boring locations are approximate.
2. Basemap was provided by Presidio Trust.
3. "X" = Indicates the chemical exceeds screening level at this location.
4. ft bgs = feet below ground surface
5. PCOC = Potential Chemical of Concern
6. NA = Not Analyzed
7. "J+" = Estimated High Bias
8. "J-" = Estimated Low Bias
9. "U" = Qualified as No-Detection
10. "J" = Estimated Value
11. ND(0.0078) = not detected at reporting limit indicated in parentheses
12. "RES, ECO-SS" = Residential Human Health and Ecological Special Status Species Cleanup Levels
13. "RES, ECO-Buffer" = Residential Human Health and Ecological Buffer Zone Cleanup Levels
14. PAHs = Polynuclear aromatic hydrocarbons
15. Posted data shown in green type face are preliminary and have not undergone Level III data validation
16. BBDA = Baker Beach Disturbed Area
17. MRFS = Merchant Road Fill Site
18. "b" = High response observed for analyte in initial or continuing calibration verification; analyte was not detected at or above the reporting limit in the associated sample.
19. Toxic equivalency concentrations (TCDD TEQ) are in mg/kg
20. "c" = Presence confirmed, but the relative percent difference between columns exceeds 4%.
21. Qualifiers for posted data shown in black type face (pre-December 2006) are listed as lab qualifier/validation qualifier.
22. Samples not analyzed for pesticides.

0 20 40
APPROXIMATE SCALE IN FEET

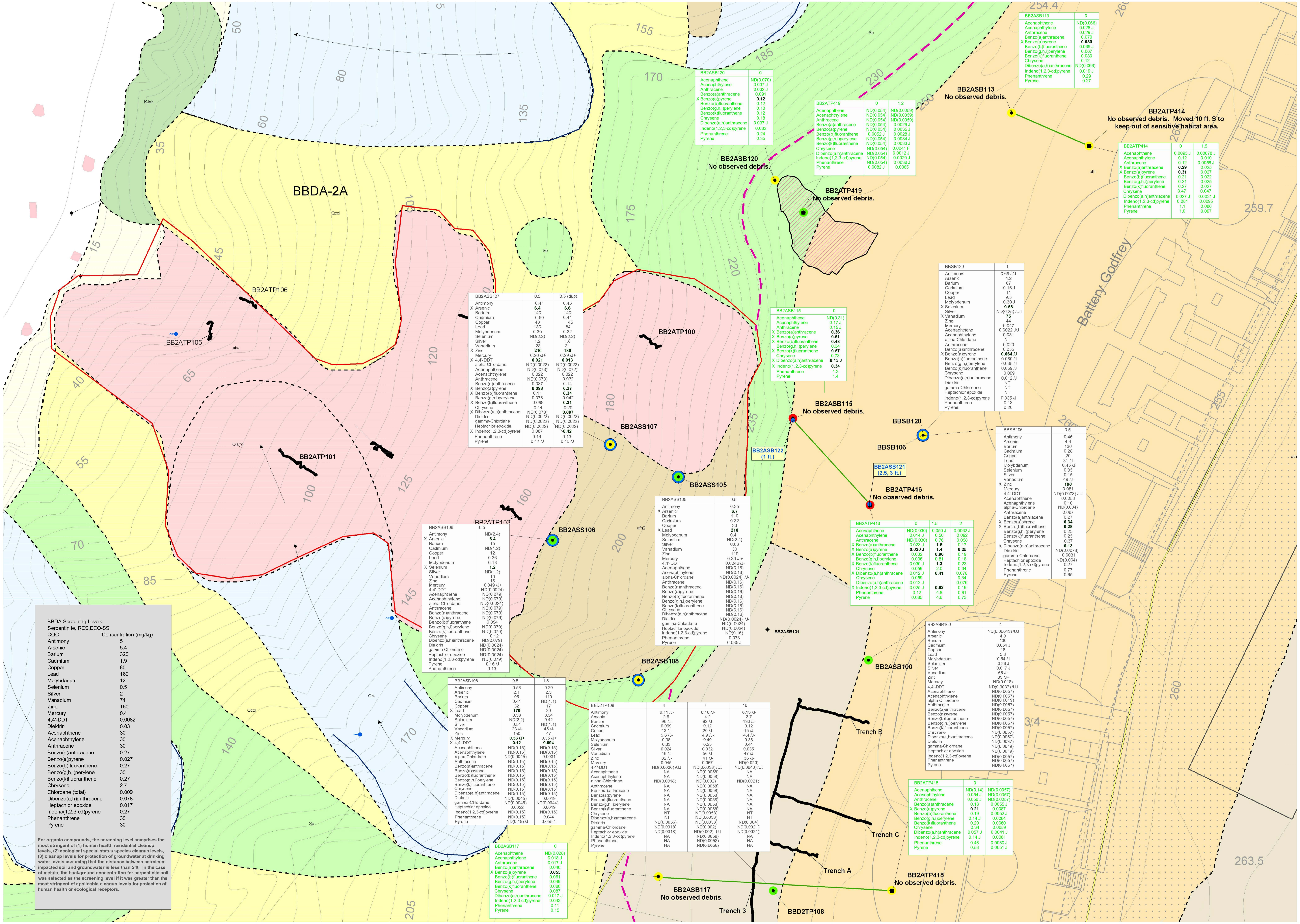


PCOCs in Soil
Baker Beach Disturbed Areas Frontal Slope and Bluff Top Areas

THE PRESIDIO TRUST

CHECKED	FIGURE 3c
APPROVED	
DATE	
PROJECT NUMBER 57255 005115	

57255283.DWG 40.0
20070424.1436



BB2ASB120	0
Acenaphthene	ND(0.070)
Acenaphthylene	0.037 J
Anthracene	0.032 J
Benzo(a)anthracene	0.091
X Benzo(a)pyrene	**0.12**
Benzo(b)fluoranthene	0.12
Benzo(g,h,i)perylene	0.10
Benzo(k)fluoranthene	0.12
Chrysene	0.18
Dibenzo(a,h)anthracene	0.037 J
Indeno(1,2,3-cd)pyrene	0.082
Phenanthrene	0.24
Pyrene	0.35

BB2ATP419	0	1.2
Acenaphthene	ND(0.054)	ND(0.0059)
Acenaphthylene	ND(0.054)	ND(0.0059)
Anthracene	ND(0.054)	ND(0.0059)
Benzo(a)anthracene	ND(0.054)	0.0029 J
Benzo(a)pyrene	ND(0.054)	0.0035 J
Benzo(b)fluoranthene	0.0052 J	0.0028 J
Benzo(g,h,i)perylene	ND(0.054)	0.0034 J
Benzo(k)fluoranthene	ND(0.054)	0.0033 J
Chrysene	ND(0.054)	0.0041 F
Dibenzo(a,h)anthracene	ND(0.054)	0.0012 J
Indeno(1,2,3-cd)pyrene	ND(0.054)	0.0029 J
Phenanthrene	ND(0.054)	0.0036 J
Pyrene	0.0082 J	0.0065

BB2ASB113	0
Acenaphthene	ND(0.066)
Acenaphthylene	0.028 J
Anthracene	0.029 J
Benzo(a)anthracene	0.070
X Benzo(a)pyrene	**0.080**
Benzo(b)fluoranthene	0.065 J
Benzo(g,h,i)perylene	0.067
Benzo(k)fluoranthene	0.080
Chrysene	0.12
Dibenzo(a,h)anthracene	ND(0.066)
Indeno(1,2,3-cd)pyrene	0.019 J
Phenanthrene	0.29
Pyrene	0.27

BB2ATP414	0	1.5
Acenaphthene	0.0095 J	0.00078 J
Acenaphthylene	0.12	0.010
Anthracene	0.12	0.0056 J
X Benzo(a)anthracene	**0.29**	0.025
X Benzo(a)pyrene	**0.31**	0.027
Benzo(b)fluoranthene	0.21	0.022
Benzo(g,h,i)perylene	0.21	0.025
Benzo(k)fluoranthene	0.27	0.027
Chrysene	0.47	0.047
Dibenzo(a,h)anthracene	0.027 J	0.0031 J
Indeno(1,2,3-cd)pyrene	0.081	0.0095
Phenanthrene	1.1	0.086
Pyrene	1.0	0.097

BB2ASS107	0.5	0.5 (dup)
Antimony	0.41	0.45
X Arsenic	**6.4**	**6.6**
Barium	140	140
Cadmium	0.50	0.41
Copper	43	45
Lead	130	84
Molybdenum	0.30	0.32
Selenium	ND(2.2)	ND(2.2)
Silver	1.2	1.8
Vanadium	28	31
X Zinc	**210**	**180**
Mercury	0.26 /J+	0.29 /J+
X 4,4'-DDT	**0.021**	**0.013**
alpha-Chlordane	ND(0.0022)	ND(0.0022)
Acenaphthene	ND(0.073)	ND(0.072)
Acenaphthylene	0.022	0.022
Anthracene	ND(0.073)	0.032
Benzo(a)anthracene	0.087	0.14
X Benzo(a)pyrene	**0.098**	**0.37**
X Benzo(b)fluoranthene	0.11	**0.34**
Benzo(g,h,i)perylene	0.076	0.042
X Benzo(k)fluoranthene	0.098	**0.31**
Chrysene	0.14	0.20
X Dibenzo(a,h)anthracene	ND(0.073)	**0.097**
Dieldrin	ND(0.0022)	ND(0.0022)
gamma-Chlordane	ND(0.0022)	ND(0.0022)
Heptachlor epoxide	ND(0.0022)	ND(0.0022)
X Indeno(1,2,3-cd)pyrene	0.087	**0.42**
Phenanthrene	0.14	0.13
Pyrene	0.17 /J	0.15 /J

BB2ASS106	0.5
Antimony	ND(2.4)
X Arsenic	**6.4**
Barium	15
Cadmium	ND(1.2)
Copper	12
Lead	0.36
Molybdenum	0.18
X Selenium	**1.2**
Silver	ND(1.2)
Vanadium	10
Zinc	16
Mercury	0.049 /J+
4,4'-DDT	ND(0.0024)
Acenaphthene	ND(0.079)
Acenaphthylene	ND(0.079)
alpha-Chlordane	ND(0.0024)
Anthracene	ND(0.079)
Benzo(a)anthracene	ND(0.079)
Benzo(a)pyrene	ND(0.079)
Benzo(b)fluoranthene	0.094
Benzo(g,h,i)perylene	ND(0.079)
Benzo(k)fluoranthene	ND(0.079)
Chrysene	0.12
Dibenzo(a,h)anthracene	ND(0.079)
Dieldrin	ND(0.0024)
gamma-Chlordane	ND(0.0024)
Heptachlor epoxide	ND(0.0024)
Indeno(1,2,3-cd)pyrene	ND(0.079)
Pyrene	0.16 /J
Phenanthrene	0.13

BB2ASS105	0.5
Antimony	0.35
X Arsenic	**6.7**
Barium	110
Cadmium	0.32
Copper	33
X Lead	**210**
Molybdenum	0.41
Selenium	ND(2.4)
Silver	0.63
Vanadium	30
Zinc	110
Mercury	0.30 /J+
4,4'-DDT	0.0046 /J-
Acenaphthene	ND(0.16)
Acenaphthylene	ND(0.16)
alpha-Chlordane	ND(0.0024) /J-
Anthracene	ND(0.16)
Benzo(a)anthracene	ND(0.16)
Benzo(a)pyrene	ND(0.16)
Benzo(b)fluoranthene	ND(0.16)
Benzo(g,h,i)perylene	ND(0.16)
Benzo(k)fluoranthene	ND(0.16)
Chrysene	ND(0.16)
Dibenzo(a,h)anthracene	ND(0.16)
Dieldrin	ND(0.0024) /J-
gamma-Chlordane	ND(0.0024)
Heptachlor epoxide	ND(0.0024)
Indeno(1,2,3-cd)pyrene	ND(0.16)
Phenanthrene	0.073
Pyrene	0.085 /J

BB2ASB115	0
Acenaphthene	ND(0.31)
Acenaphthylene	0.17 J
Anthracene	0.15 J
X Benzo(a)anthracene	**0.36**
X Benzo(a)pyrene	**0.51**
X Benzo(b)fluoranthene	**0.48**
Benzo(g,h,i)perylene	0.34
X Benzo(k)fluoranthene	**0.57**
Chrysene	0.73
X Dibenzo(a,h)anthracene	**0.13 J**
X Indeno(1,2,3-cd)pyrene	**0.34**
Phenanthrene	1.3
Pyrene	1.4

BBSB120	1
Antimony	0.69 J/J-
Arsenic	4.2
Barium	67
Cadmium	0.16 J
Copper	11
Lead	9.5
Molybdenum	0.30 J
X Selenium	**0.58**
Silver	ND(0.25) /UJ
X Vanadium	**75**
Zinc	44
Mercury	0.047
Acenaphthene	0.0022 J/J
Acenaphthylene	0.031
alpha-Chlordane	NT
Anthracene	0.020
Benzo(a)anthracene	0.055
X Benzo(a)pyrene	**0.064 /J**
Benzo(b)fluoranthene	0.060 /J
Benzo(g,h,i)perylene	0.035 /J
Benzo(k)fluoranthene	0.059 /J
Chrysene	0.099
Dibenzo(a,h)anthracene	0.012 /J
Dieldrin	NT
gamma-Chlordane	NT
Heptachlor epoxide	NT
Indeno(1,2,3-cd)pyrene	0.035 /J
Phenanthrene	0.18
Pyrene	0.20

BBSB106	0.5
Antimony	0.46
Arsenic	4.4
Barium	130
Cadmium	0.28
Copper	20
Lead	31 /J-
Molybdenum	0.45 /J
Selenium	0.35
Silver	0.15
Vanadium	49 /J-
X Zinc	**190**
Mercury	0.081
4,4'-DDT	ND(0.0078) /UJ
Acenaphthene	0.0058
Acenaphthylene	0.10
alpha-Chlordane	ND(0.004)
Anthracene	0.067
Benzo(a)anthracene	0.27
X Benzo(a)pyrene	**0.34**
X Benzo(b)fluoranthene	**0.28**
Benzo(g,h,i)perylene	0.23
Benzo(k)fluoranthene	0.25
Chrysene	0.37
X Dibenzo(a,h)anthracene	**0.13**
Dieldrin	ND(0.0078)
gamma-Chlordane	0.0031
Heptachlor epoxide	ND(0.004)
Indeno(1,2,3-cd)pyrene	0.27
Phenanthrene	0.77
Pyrene	0.65

BB2ATP416	0	1.5	2
Acenaphthene	ND(0.030)	0.050 J	0.0062 J
Acenaphthylene	0.014 J	0.50	0.092
Anthracene	ND(0.030)	0.76	0.058
X Benzo(a)anthracene	0.023 J	**1.6**	0.17
X Benzo(a)pyrene	**0.030 J**	**1.4**	**0.25**
X Benzo(b)fluoranthene	0.032	**0.96**	0.19
Benzo(g,h,i)perylene	0.036	0.81	0.18
X Benzo(k)fluoranthene	0.030 J	**1.3**	0.23
Chrysene	0.059	2.0	0.34
X Dibenzo(a,h)anthracene	0.012 J	**0.41**	0.076
Chrysene	0.059		0.34
Dibenzo(a,h)anthracene	0.012 J		0.076
X Indeno(1,2,3-cd)pyrene	0.025 J	**0.92**	0.19
Phenanthrene	0.12	4.8	0.81
Pyrene	0.085	4.6	0.73

BB2ASB100	4
Antimony	ND(0.00043) /UJ
Arsenic	4.0
Barium	130
Cadmium	0.064 J
Copper	16
Lead	5.8
Molybdenum	0.54 /J
Selenium	0.26 J
Silver	0.017 J
Vanadium	66 /J-
Zinc	35 /J+
Mercury	ND(0.018)
4,4'-DDT	ND(0.0037) /UJ
Acenaphthene	ND(0.0057)
Acenaphthylene	ND(0.0057)
alpha-Chlordane	ND(0.0019)
Anthracene	ND(0.0057)
Benzo(a)anthracene	ND(0.0057)
Benzo(a)pyrene	ND(0.0057)
Benzo(b)fluoranthene	ND(0.0057)
Benzo(g,h,i)perylene	ND(0.0057)
Benzo(k)fluoranthene	ND(0.0057)
Chrysene	ND(0.0057)
Dibenzo(a,h)anthracene	ND(0.0057)
Dieldrin	ND(0.0037)
gamma-Chlordane	ND(0.0019)
Heptachlor epoxide	ND(0.0019)
Indeno(1,2,3-cd)pyrene	ND(0.0057)
Phenanthrene	ND(0.0057)
Pyrene	ND(0.0057)

BB2ASB108	0.5	1.5
Antimony	0.56	0.20
Arsenic	2.1	2.3
Barium	95	110
Cadmium	0.41	ND(1.1)
Copper	32	17
X Lead	**170**	29
Molybdenum	0.33	0.34
Selenium	ND(2.2)	0.42
Silver	0.54	ND(1.1)
Vanadium	23 /J-	45 /J-
Zinc	150	47
X Mercury	**0.58 /J+**	0.35 /J+
X 4,4'-DDT	**0.12**	**0.094**
Acenaphthene	ND(0.15)	ND(0.15)
Acenaphthylene	ND(0.15)	ND(0.15)
alpha-Chlordane	ND(0.0045)	0.0031
Anthracene	ND(0.15)	ND(0.15)
Benzo(a)anthracene	ND(0.15)	ND(0.15)
Benzo(a)pyrene	ND(0.15)	ND(0.15)
Benzo(b)fluoranthene	ND(0.15)	ND(0.15)
Benzo(g,h,i)perylene	ND(0.15)	ND(0.15)
Benzo(k)fluoranthene	ND(0.15)	ND(0.15)
Chrysene	ND(0.15)	ND(0.15)
Dibenzo(a,h)anthracene	ND(0.15)	ND(0.15)
Dieldrin	ND(0.0045)	0.0019
gamma-Chlordane	ND(0.0045)	ND(0.0044)
Heptachlor epoxide	0.0022	0.0019
Indeno(1,2,3-cd)pyrene	ND(0.15)	ND(0.15)
Phenanthrene	ND(0.15)	0.044
Pyrene	ND(0.15) /J	0.055 /J

BBD2TP108	4	7	10
Antimony	0.11 /J-	0.18 /J-	0.13 /J-
Arsenic	2.8	4.2	2.7
Barium	96 /J-	92 /J-	130 /J-
Cadmium	0.099	0.12	0.12
Copper	13 /J-	20 /J-	15 /J-
Lead	5.6 /J-	4.9 /J-	4.4 /J-
Molybdenum	0.38	0.40	0.38
Selenium	0.33	0.25	0.44
Silver	0.024	0.032	0.035
Vanadium	46 /J-	56 /J-	47 /J-
Zinc	32 /J-	41 /J-	36 /J-
Mercury	0.045	0.057	ND(0.020)
4,4'-DDT	ND(0.0036) /UJ	ND(0.0038) /UJ	ND(0.0040) /UJ
Acenaphthene	NA	ND(0.0058)	NA
Acenaphthylene	NA	ND(0.0058)	NA
alpha-Chlordane	ND(0.0018)	ND(0.002)	ND(0.0021)
Anthracene	NA	ND(0.0058)	NA
Benzo(a)anthracene	NA	ND(0.0058)	NA
Benzo(a)pyrene	NA	ND(0.0058)	NA
Benzo(b)fluoranthene	NA	ND(0.0058)	NA
Benzo(g,h,i)perylene	NA	ND(0.0058)	NA
Benzo(k)fluoranthene	NA	ND(0.0058)	NA
Chrysene	NT	ND(0.0058)	NT
Dibenzo(a,h)anthracene	NT	ND(0.0058)	NT
Dieldrin	ND(0.0036)	ND(0.0038)	ND(0.004)
gamma-Chlordane	ND(0.0018)	ND(0.002)	ND(0.0021)
Heptachlor epoxide	ND(0.0018)	ND(0.002) UJ	ND(0.0021)
Indeno(1,2,3-cd)pyrene	NA	ND(0.0058)	NA
Phenanthrene	NA	ND(0.0058)	NA
Pyrene	NA	ND(0.0058)	NA

BB2ASB117	0
Acenaphthene	ND(0.028)
Acenaphthylene	0.018 J
Anthracene	0.017 J
Benzo(a)anthracene	0.040
X Benzo(a)pyrene	**0.055**
Benzo(b)fluoranthene	0.061
Benzo(g,h,i)perylene	0.049
Benzo(k)fluoranthene	0.066
Chrysene	0.087
Dibenzo(a,h)anthracene	0.017 J
Indeno(1,2,3-cd)pyrene	0.043
Phenanthrene	0.11
Pyrene	0.15

BB2ATP418	0	1
Acenaphthene	ND(0.14)	ND(0.0057)
Acenaphthylene	0.054 J	ND(0.0057)
Anthracene	0.056 J	ND(0.0057)
Benzo(a)anthracene	0.18	0.0055 J
X Benzo(a)pyrene	**0.21**	0.0087
Benzo(b)fluoranthene	0.19	0.0052 J
Benzo(g,h,i)perylene	0.14 J	0.0084
Benzo(k)fluoranthene	0.20	0.0060
Chrysene	0.34	0.0059
Dibenzo(a,h)anthracene	0.057 J	0.0041 J
Indeno(1,2,3-cd)pyrene	0.14 J	0.0081
Phenanthrene	0.46	0.0030 J
Pyrene	0.58	0.0051 J

BBDA Screening Levels
Serpentinite, RES,ECO-SS

COC	Concentration (mg/kg)
Antimony	5
Arsenic	5.4
Barium	320
Cadmium	1.9
Copper	85
Lead	160
Molybdenum	12
Selenium	0.5
Silver	2
Vanadium	74
Zinc	160
Mercury	0.4
4,4'-DDT	0.0082
Dieldrin	0.03
Acenaphthene	30
Acenaphthylene	30
Anthracene	30
Benzo(a)anthracene	0.27
Benzo(a)pyrene	0.027
Benzo(b)fluoranthene	0.27
Benzo(g,h,i)perylene	30
Benzo(k)fluoranthene	0.27
Chrysene	2.7
Chlordane (total)	0.009
Dibenzo(a,h)anthracene	0.078
Heptachlor epoxide	0.017
Indeno(1,2,3-cd)pyrene	0.27
Phenanthrene	30
Pyrene	30

For organic compounds, the screening level comprises the most stringent of (1) human health residential cleanup levels, (2) ecological special status species cleanup levels, (3) cleanup levels for protection of groundwater at drinking water levels assuming that the distance between petroleum impacted soil and groundwater is less than 5 ft. In the case of metals, the background concentration for serpentinite soil was selected as the screening level if it was greater than the most stringent of applicable cleanup levels for protection of human health or ecological receptors.

MACTEC

EXPLANATION

Geologic Contact, dashed where approximate, queried where uncertain.

afh	Battery West Historic Fill: most recent construction and still in place (afh), disturbed on bluff top where stippled (afh1), and disturbed downslope where shaded (ahf2)
afw	Waste Fill
afo	Other Fill
Qls	Landslide Deposits
Qcol	Colma Fm/Native Soils
Sp	Serpentinite
KJm	Melange
KJss/ KJsh	Sandstone Shale
Qb	Beach Deposit

▨ Mapped Debris Area (2006). Additional isolated debris items may be present outside of areas shown.

Seep

BB2SB102 ● Boring

BB2TP100 Test Pit

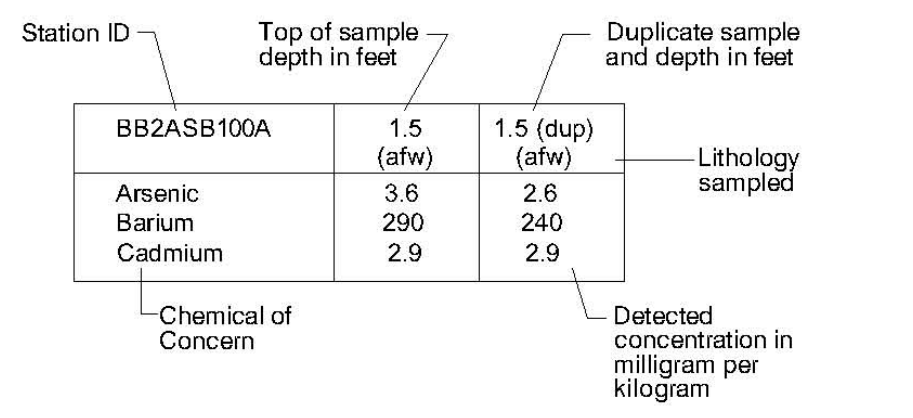
● Proposed Boring

Estimated Limit of PAHs in Soil Exceeding Screening Levels

Trails

Location Identified to have PCOCs above Screening Levels in Soil

- 🔴 6 or more PAH or pesticide screening level exceedances
- 🟡 1 to 5 PAH or pesticide screening level exceedances
- 🟢 No PAH or pesticide screening level exceedances
- ○ Metals exceedances

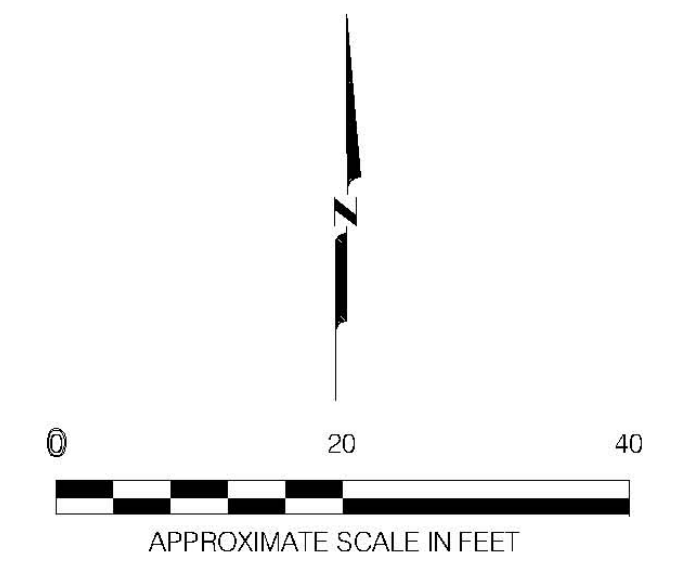

Station ID
Top of sample depth in feet
Duplicate sample and depth in feet
Lithology sampled
Chemical of Concern
Detected concentration in milligram per kilogram

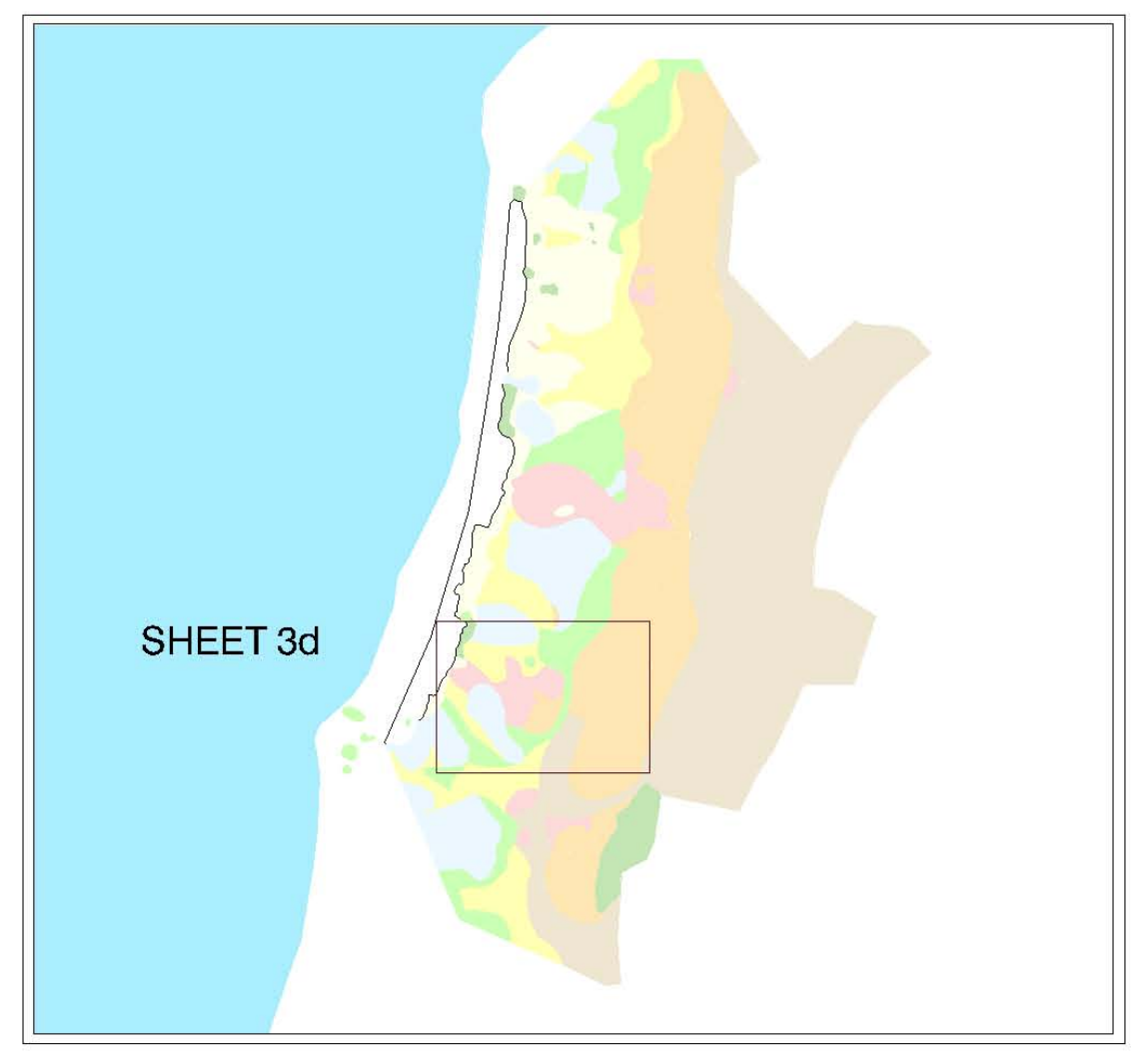
BB2ASB100A	1.5 (afw)	1.5 (dup) (afw)
Arsenic	3.6	2.6
Barium	290	240
Cadmium	2.9	2.9

Results shown in **BOLD BLACK** type face exceed applicable screening levels Previous sample results shown in black; 2006 data are shown in green. All December 2006 sample locations presented on this plate were analyzed for PAHs only. Results are shown for only those analytes exceeding screening levels in samples collected from the BBDAs or MRFS.

Notes:

1. All previous boring locations are approximate.
2. Basemap was provided by Presidio Trust.
3. "X" = Indicates the chemical exceeds screening level at this location.
4. ft bgs = feet below ground surface
5. PCOC = Potential Chemical of Concern
6. NA = Not Analyzed
7. "J+" = Estimated High Bias
8. "J-" = Estimated Low Bias
9. "U" = Qualified as No-Detection
10. "J" = Estimated Value
11. ND(0.0078) = not detected at reporting limit indicated in parentheses
12. "RES, ECO-SS" = Residential Human Health and Ecological Special Status Species Cleanup Levels
13. "RES, ECO-Buffer" = Residential Human Health and Ecological Buffer Zone Cleanup Levels
14. PAHs = Polynuclear aromatic hydrocarbons
15. Posted data shown in green type face are preliminary and have not undergone Level III data validation
16. BBDA = Baker Beach Disturbed Area
17. MRFS = Merchant Road Fill Site
18. "b" = High response observed for analyte in initial or continuing calibration verification; analyte was not detected at or above the reporting limit in the associated sample.
19. Qualifiers for posted data shown in black type face (pre-December 2006) are listed as lab qualifier/validation qualifier

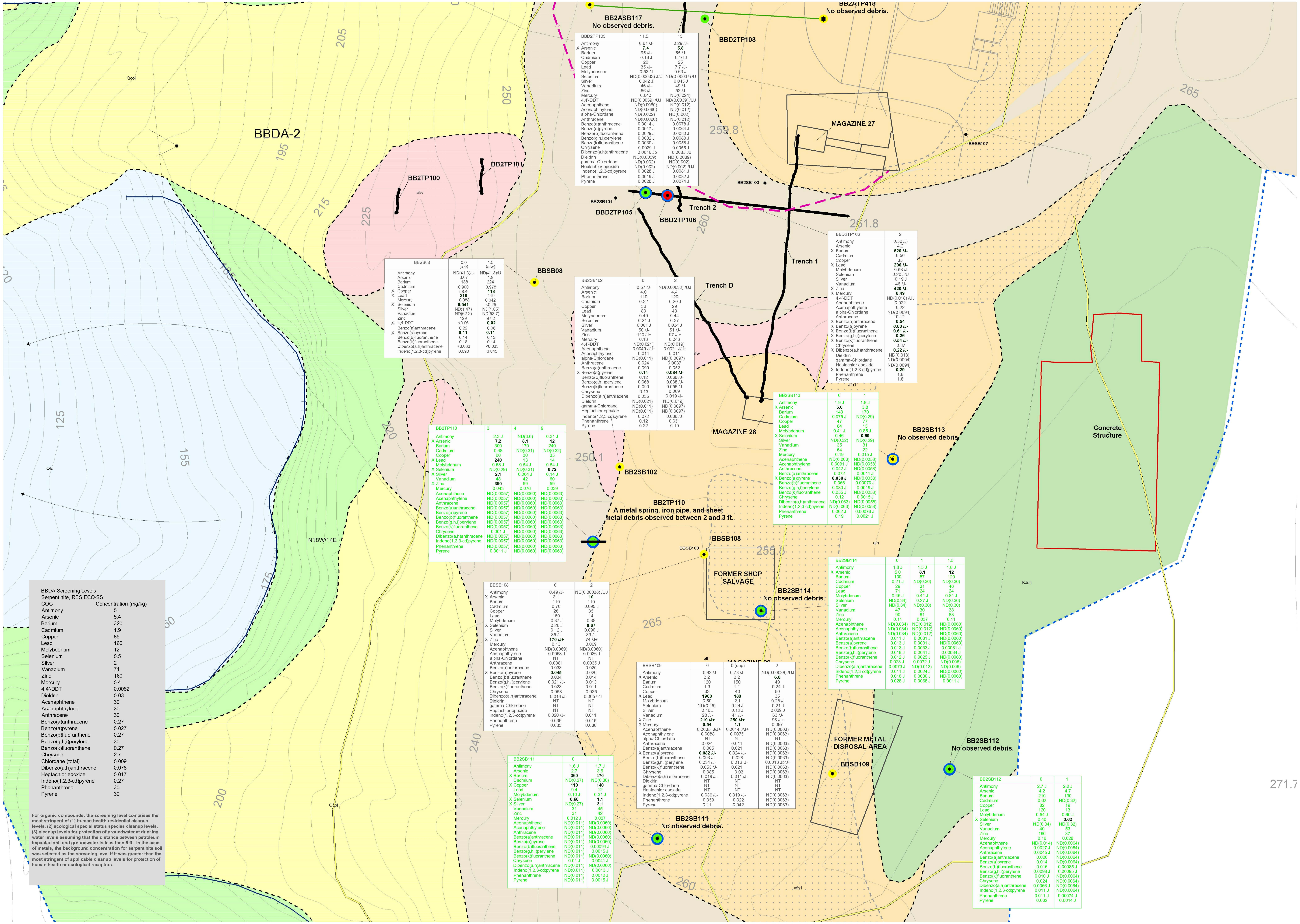




THE PRESIDIO TRUST

PCOCs in Soil Baker Beach Disturbed Areas Frontal Slope and Bluff Top Areas

CHECKED
APPROVED
DATE
PROJECT NUMBER 57255 005115
FIGURE 3d



	BBD2TP105	11.5	15
	Antimony	0.61 /J-	0.29 /J-
X	Arsenic	**7.4**	**5.8**
	Barium	95 /J-	55 /J-
	Cadmium	0.16 J	0.16 J
	Copper	20	25
	Lead	35 /J-	7.7 /J-
	Molybdenum	0.53 /J	0.63 /J
	Selenium	ND(0.00033) J/U	ND(0.00037) /U
	Silver	0.042 J	0.043 J
	Vanadium	46 /J-	49 /J-
	Zinc	56 /J-	52 /J-
	Mercury	0.040	ND(0.024)
	4,4'-DDT	ND(0.0039) /UJ	ND(0.0039) /UJ
	Acenaphthene	ND(0.0060)	ND(0.012)
	Acenaphthylene	ND(0.0060)	ND(0.012)
	alpha-Chlordane	ND(0.002)	ND(0.002)
	Anthracene	ND(0.0060)	ND(0.012)
	Benzo(a)anthracene	0.0014 J	0.0078 J
	Benzo(a)pyrene	0.0017 J	0.0064 J
	Benzo(b)fluoranthene	0.0029 J	0.0080 J
	Benzo(g,h,i)perylene	0.0032 J	0.0080 J
	Benzo(k)fluoranthene	0.0030 J	0.0058 J
	Chrysene	0.0029 J	0.0055 J
	Dibenzo(a,h)anthracene	0.0016 Jb	0.0085 Jb
	Dieldrin	ND(0.0039)	ND(0.0039)
	gamma-Chlordane	ND(0.002)	ND(0.002)
	Heptachlor epoxide	ND(0.002)	ND(0.002) /UJ
	Indeno(1,2,3-cd)pyrene	0.0028 J	0.0081 J
	Phenanthrene	0.0019 J	0.0032 J
	Pyrene	0.0028 J	0.0074 J

	BBSB08	0.0 (afo)	1.5 (afw)
	Antimony	ND(41.3)/U	ND(41.3)/U
	Arsenic	3.67	1.9
	Barium	138	224
	Cadmium	0.900	0.978
X	Copper	68.4	**118**
X	Lead	**210**	110
	Mercury	0.088	0.042
X	Selenium	**0.541**	<0.25
	Silver	ND(1.47)	ND(1.65)
	Vanadium	ND(62.2)	ND(53.7)
	Zinc	129	97.2
X	4,4-DDT	<0.06	**0.02**
	Benzo(a)anthracene	0.22	0.08
X	Benzo(a)pyrene	**0.11**	**0.11**
	Benzo(b)fluoranthene	0.14	0.13
	Benzo(k)fluoranthene	0.18	0.14
	Dibenzo(a,h)anthracene	<0.033	<0.033
	Indeno(1,2,3-cd)pyrene	0.090	0.045

	BB2SB102	0	2
	Antimony	0.57 /J-	ND(0.00032) /UJ
	Arsenic	4.0	4.4
	Barium	110	120
	Cadmium	0.32	0.20 J
	Copper	36	29
	Lead	80	40
	Molybdenum	0.49	0.44
	Selenium	0.24 J	0.37
	Silver	0.061 J	0.034 J
	Vanadium	50 /J-	51 /J-
	Zinc	110 /J+	97 /J+
	Mercury	0.13	0.046
	4,4'-DDT	ND(0.021)	ND(0.019)
	Acenaphthene	0.0049 J/J+	0.0021 J/J+
	Acenaphthylene	0.014	0.011
	alpha-Chlordane	ND(0.011)	ND(0.0097)
	Anthracene	0.024	0.0087
	Benzo(a)anthracene	0.099	0.052
X	Benzo(a)pyrene	**0.14**	**0.084 /J-**
	Benzo(b)fluoranthene	0.12	0.068 /J-
	Benzo(g,h,i)perylene	0.068	0.038 /J-
	Benzo(k)fluoranthene	0.090	0.055 /J-
	Chrysene	0.13	0.069
	Dibenzo(a,h)anthracene	0.035	0.019 /J-
	Dieldrin	ND(0.021)	ND(0.019)
	gamma-Chlordane	ND(0.011)	ND(0.0097)
	Heptachlor epoxide	ND(0.011)	ND(0.0097)
	Indeno(1,2,3-cd)pyrene	0.072	0.036 /J-
	Phenanthrene	0.12	0.051
	Pyrene	0.22	0.10

	BBD2TP106	2
	Antimony	0.56 /J-
	Arsenic	4.2
X	Barium	**520 /J-**
	Cadmium	0.50
	Copper	35
X	Lead	**200 /J-**
	Molybdenum	0.53 /J
	Selenium	0.20 J/U
	Silver	0.19 J
	Vanadium	46 /J-
X	Zinc	**420 /J-**
X	Mercury	**0.49**
	4,4'-DDT	ND(0.018) /UJ
	Acenaphthene	0.022
	Acenaphthylene	0.22
	alpha-Chlordane	ND(0.0094)
	Anthracene	0.12
X	Benzo(a)anthracene	**0.54**
X	Benzo(a)pyrene	**0.80 /J-**
X	Benzo(b)fluoranthene	**0.61 /J-**
X	Benzo(g,h,i)perylene	**0.26**
X	Benzo(k)fluoranthene	**0.54 /J-**
	Chrysene	0.87
X	Dibenzo(a,h)anthracene	**0.22 /J-**
	Dieldrin	ND(0.018)
	gamma-Chlordane	ND(0.0094)
	Heptachlor epoxide	ND(0.0094)
X	Indeno(1,2,3-cd)pyrene	**0.29**
	Phenanthrene	1.8
	Pyrene	1.8

	BB2TP110	3	4	9
	Antimony	2.3 J	ND(3.6)	0.31 J
X	Arsenic	**7.2**	**8.1**	**12**
	Barium	300	170	240
	Cadmium	0.48	ND(0.31)	ND(0.32)
	Copper	60	30	35
X	Lead	**240**	13	14
	Molybdenum	0.68 J	0.54 J	0.54 J
X	Selenium	ND(0.29)	ND(0.31)	**0.72**
X	Silver	**2.1**	0.064 J	0.14 J
	Vanadium	48	42	60
X	Zinc	**390**	59	59
	Mercury	0.043	0.076	0.039
	Acenaphthene	ND(0.0057)	ND(0.0060)	ND(0.0063)
	Acenaphthylene	ND(0.0057)	ND(0.0060)	ND(0.0063)
	Anthracene	ND(0.0057)	ND(0.0060)	ND(0.0063)
	Benzo(a)anthracene	ND(0.0057)	ND(0.0060)	ND(0.0063)
	Benzo(a)pyrene	ND(0.0057)	ND(0.0060)	ND(0.0063)
	Benzo(b)fluoranthene	ND(0.0057)	ND(0.0060)	ND(0.0063)
	Benzo(g,h,i)perylene	ND(0.0057)	ND(0.0060)	ND(0.0063)
	Benzo(k)fluoranthene	ND(0.0057)	ND(0.0060)	ND(0.0063)
	Chrysene	0.001 J	ND(0.0060)	ND(0.0063)
	Dibenzo(a,h)anthracene	ND(0.0057)	ND(0.0060)	ND(0.0063)
	Indeno(1,2,3-cd)pyrene	ND(0.0057)	ND(0.0060)	ND(0.0063)
	Phenanthrene	ND(0.0057)	ND(0.0060)	ND(0.0063)
	Pyrene	0.0011 J	ND(0.0060)	ND(0.0063)

	BB2SB113	0	1
	Antimony	1.9 J	1.8 J
X	Arsenic	**5.6**	3.8
	Barium	140	170
	Cadmium	0.075 J	ND(0.29)
	Copper	47	77
	Lead	64	15
	Molybdenum	0.41 J	0.85 J
X	Selenium	0.46	**0.59**
	Silver	ND(0.32)	ND(0.29)
	Vanadium	35	31
	Zinc	64	22
	Mercury	0.19	0.015 J
	Acenaphthene	ND(0.063)	ND(0.0058)
	Acenaphthylene	0.0091 J	ND(0.0058)
	Anthracene	0.042 J	ND(0.0058)
	Benzo(a)anthracene	0.072	0.0011 J
X	Benzo(a)pyrene	**0.030 J**	ND(0.0058)
	Benzo(b)fluoranthene	0.066	0.00070 J
	Benzo(g,h,i)perylene	0.030 J	0.0019 J
	Benzo(k)fluoranthene	0.055 J	ND(0.0058)
	Chrysene	0.12	0.0015 J
	Dibenzo(a,h)anthracene	ND(0.063)	ND(0.0058)
	Indeno(1,2,3-cd)pyrene	ND(0.063)	ND(0.0058)
	Phenanthrene	0.062 J	0.00076 J
	Pyrene	0.19	0.0021 J

	BBSB108	0	2
	Antimony	0.49 /J-	ND(0.00038) /UJ
X	Arsenic	3.1	**10**
	Barium	110	110
	Cadmium	0.70	0.095 J
	Copper	26	35
	Lead	160	14
	Molybdenum	0.37 J	0.38
X	Selenium	0.26 J	**0.67**
	Silver	0.12 J	0.090 J
	Vanadium	35 /J-	33 /J-
X	Zinc	**170 /J+**	74 /J+
	Mercury	0.13	0.069
	Acenaphthene	ND(0.0069)	ND(0.0060)
	Acenaphthylene	0.0068 J	0.0036 J
	alpha-Chlordane	NT	NT
	Anthracene	0.0081	0.0035 J
	Benzo(a)anthracene	0.038	0.020
X	Benzo(a)pyrene	**0.045**	0.020
	Benzo(b)fluoranthene	0.034	0.014
	Benzo(g,h,i)perylene	0.021 /J-	0.013
	Benzo(k)fluoranthene	0.028	0.011
	Chrysene	0.058	0.025
	Dibenzo(a,h)anthracene	0.014 /J-	0.0057 /J
	Dieldrin	NT	NT
	gamma-Chlordane	NT	NT
	Heptachlor epoxide	NT	NT
	Indeno(1,2,3-cd)pyrene	0.020 /J-	0.011
	Phenanthrene	0.036	0.015
	Pyrene	0.085	0.036

	BB2SB114	0	1	1.5
	Antimony	1.8 J	1.5 J	1.8 J
X	Arsenic	5.0	**8.1**	**12**
	Barium	100	87	120
	Cadmium	0.21 J	ND(0.30)	ND(0.30)
	Copper	29	31	46
	Lead	71	24	24
	Molybdenum	0.46 J	0.41 J	0.81 J
	Selenium	ND(0.34)	0.27 J	ND(0.30)
	Silver	ND(0.34)	ND(0.30)	ND(0.30)
	Vanadium	47	30	38
	Zinc	90	61	88
	Mercury	0.11	0.037	0.11
	Acenaphthene	ND(0.034)	ND(0.012)	ND(0.0060)
	Acenaphthylene	ND(0.034)	ND(0.012)	ND(0.0060)
	Anthracene	ND(0.034)	ND(0.012)	ND(0.0060)
	Benzo(a)anthracene	0.011 J	0.0031 J	ND(0.0060)
	Benzo(a)pyrene	0.013 J	0.0031 J	ND(0.0060)
	Benzo(b)fluoranthene	0.013 J	0.0033 J	0.00061 J
	Benzo(g,h,i)perylene	0.018 J	0.0041 J	0.00084 J
	Benzo(k)fluoranthene	0.012 J	0.0025 J	ND(0.0060)
	Chrysene	0.023 J	0.0072 J	ND(0.006)
	Dibenzo(a,h)anthracene	0.0073 J	ND(0.012)	ND(0.006)
	Indeno(1,2,3-cd)pyrene	0.011 J	0.0024 J	ND(0.0060)
	Phenanthrene	0.016 J	0.0030 J	ND(0.0060)
	Pyrene	0.028 J	0.0068 J	0.0011 J

	BBSB109	0	0 (dup)	2
	Antimony	0.92 /J-	0.78 /J-	ND(0.00038) /UJ
X	Arsenic	2.2	3.2	**6.8**
	Barium	120	150	49
	Cadmium	1.3	1.1	0.24 J
	Copper	33	40	50
X	Lead	**1900**	**180**	35
	Molybdenum	0.50	2.1	0.28 /J
	Selenium	ND(0.45)	0.24 J	0.21 J
	Silver	0.16 J	0.12 J	0.039 J
	Vanadium	28 /J-	41 /J-	63 /J-
X	Zinc	**210 /J+**	**250 /J+**	96 /J+
X	Mercury	**0.54**	**1.1**	0.097
	Acenaphthene	0.0035 J/J+	0.0014 J/J+	ND(0.0063)
	Acenaphthylene	0.0088	0.0075	ND(0.0063)
	alpha-Chlordane	NT	NT	NT
	Anthracene	0.024	0.011	ND(0.0063)
	Benzo(a)anthracene	0.065	0.021	ND(0.0063)
X	Benzo(a)pyrene	**0.082 /J-**	0.024 /J-	ND(0.0063)
	Benzo(b)fluoranthene	0.093 /J-	0.028	ND(0.0063)
	Benzo(g,h,i)perylene	0.034 /J-	0.016 J-	0.0013 Jb/J+
	Benzo(k)fluoranthene	0.055 /J-	0.021	ND(0.0063)
	Chrysene	0.085	0.03	ND(0.0063)
	Dibenzo(a,h)anthracene	0.019 /J-	0.011 /J-	ND(0.0063)
	Dieldrin	NT	NT	NT
	gamma-Chlordane	NT	NT	NT
	Heptachlor epoxide	NT	NT	NT
	Indeno(1,2,3-cd)pyrene	0.036 /J-	0.019 /J-	ND(0.0063)
	Phenanthrene	0.059	0.022	ND(0.0063)
	Pyrene	0.11	0.042	ND(0.0063)

	BB2SB111	0	1
	Antimony	1.6 J	1.7 J
	Arsenic	2.7	3.6
X	Barium	**360**	**470**
	Cadmium	ND(0.27)	ND(0.30)
X	Copper	**110**	**140**
	Lead	9.4	12
	Molybdenum	0.10 J	0.31 J
X	Selenium	**0.60**	**1.1**
X	Silver	ND(0.27)	**3.1**
	Vanadium	31	45
	Zinc	31	42
	Mercury	0.012 J	0.027
	Acenaphthene	ND(0.011)	ND(0.0060)
	Acenaphthylene	ND(0.011)	ND(0.0060)
	Anthracene	ND(0.011)	ND(0.0060)
	Benzo(a)anthracene	ND(0.011)	ND(0.0060)
	Benzo(a)pyrene	ND(0.011)	ND(0.0060)
	Benzo(b)fluoranthene	ND(0.011)	0.00094 J
	Benzo(g,h,i)perylene	ND(0.011)	0.0015 J
	Benzo(k)fluoranthene	ND(0.011)	ND(0.0060)
	Chrysene	0.01 J	0.0041 J
	Dibenzo(a,h)anthracene	ND(0.011)	ND(0.0060)
	Indeno(1,2,3-cd)pyrene	ND(0.011)	0.0013 J
	Phenanthrene	ND(0.011)	0.0012 J
	Pyrene	ND(0.011)	0.0015 J

	BB2SB112	0	1
	Antimony	2.7 J	2.0 J
	Arsenic	4.2	4.7
	Barium	210	130
	Cadmium	0.62	ND(0.32)
	Copper	82	19
	Lead	120	13
	Molybdenum	0.54 J	0.60 J
X	Selenium	0.40	**0.62**
	Silver	ND(0.34)	ND(0.32)
	Vanadium	40	53
	Zinc	160	37
	Mercury	0.16	0.028
	Acenaphthene	ND(0.014)	ND(0.0064)
	Acenaphthylene	0.0027 J	ND(0.0064)
	Anthracene	0.0045 J	ND(0.0064)
	Benzo(a)anthracene	0.020	ND(0.0064)
	Benzo(a)pyrene	0.014	ND(0.0064)
	Benzo(b)fluoranthene	0.016	0.00085 J
	Benzo(g,h,i)perylene	0.0098 J	0.00095 J
	Benzo(k)fluoranthene	0.010 J	ND(0.0064)
	Chrysene	0.024	ND(0.0064)
	Dibenzo(a,h)anthracene	0.0066 J	ND(0.0064)
	Indeno(1,2,3-cd)pyrene	0.011 J	ND(0.0064)
	Phenanthrene	0.011 J	0.00074 J
	Pyrene	0.032	0.0014 J

BBDA Screening Levels
Serpentinite, RES,ECO-SS

COC	Concentration (mg/kg)
Antimony	5
Arsenic	5.4
Barium	320
Cadmium	1.9
Copper	85
Lead	160
Molybdenum	12
Selenium	0.5
Silver	2
Vanadium	74
Zinc	160
Mercury	0.4
4,4'-DDT	0.0082
Dieldrin	0.03
Acenaphthene	30
Acenaphthylene	30
Anthracene	30
Benzo(a)anthracene	0.27
Benzo(a)pyrene	0.027
Benzo(b)fluoranthene	0.27
Benzo(g,h,i)perylene	30
Benzo(k)fluoranthene	0.27
Chrysene	2.7
Chlordane (total)	0.009
Dibenzo(a,h)anthracene	0.078
Heptachlor epoxide	0.017
Indeno(1,2,3-cd)pyrene	0.27
Phenanthrene	30
Pyrene	30

For organic compounds, the screening level comprises the most stringent of (1) human health residential cleanup levels, (2) ecological special status species cleanup levels, (3) cleanup levels for protection of groundwater at drinking water levels assuming that the distance between petroleum impacted soil and groundwater is less than 5 ft. In the case of metals, the background concentration for serpentinite soil was selected as the screening level if it was greater than the most stringent of applicable cleanup levels for protection of human health or ecological receptors.

MACTEC

EXPLANATION

	Geologic Contact, dashed where approximate, queried where uncertain.
afh	Battery West Historic Fill: most recent construction and still in place (afh), disturbed on bluff top where stippled (afh1), and disturbed downslope where shaded (ahf2)
afw	Waste Fill
afo	Other Fill
Qls	Landslide Deposits
Qcol	Colma Fm/Native Soils
Sp	Serpentinite
KJm	Melange
KJss/ KJsh	Sandstone Shale
Qb	Beach Deposit
▨	Mapped Debris Area (2006). Additional isolated debris items may be present outside of areas shown.
	Seep
BB2SB102 ●	Boring
BB2TP100	Test Pit
●	Proposed Boring
	Estimated Limit of PAHs in Soil Exceeding Screening Levels
	Trails
BB1ASB129 (2.5 ft.)	Proposed boring and sample depths

Location Identified to have PCOCs above Screening Levels in Soil

- 🔴 6 or more PAH or pesticide screening level exceedances
- 🟡 1 to 5 PAH or pesticide screening level exceedances
- 🟢 No PAH or pesticide screening level exceedances
- ○ Metals exceedances

Station ID
Top of sample depth in feet
Duplicate sample and depth in feet
Lithology sampled
Chemical of Concern
Detected concentration in milligram per kilogram

BB2ASB100A	1.5 (afw)	1.5 (dup) (afw)
Arsenic	3.6	2.6
Barium	290	240
Cadmium	2.9	2.9

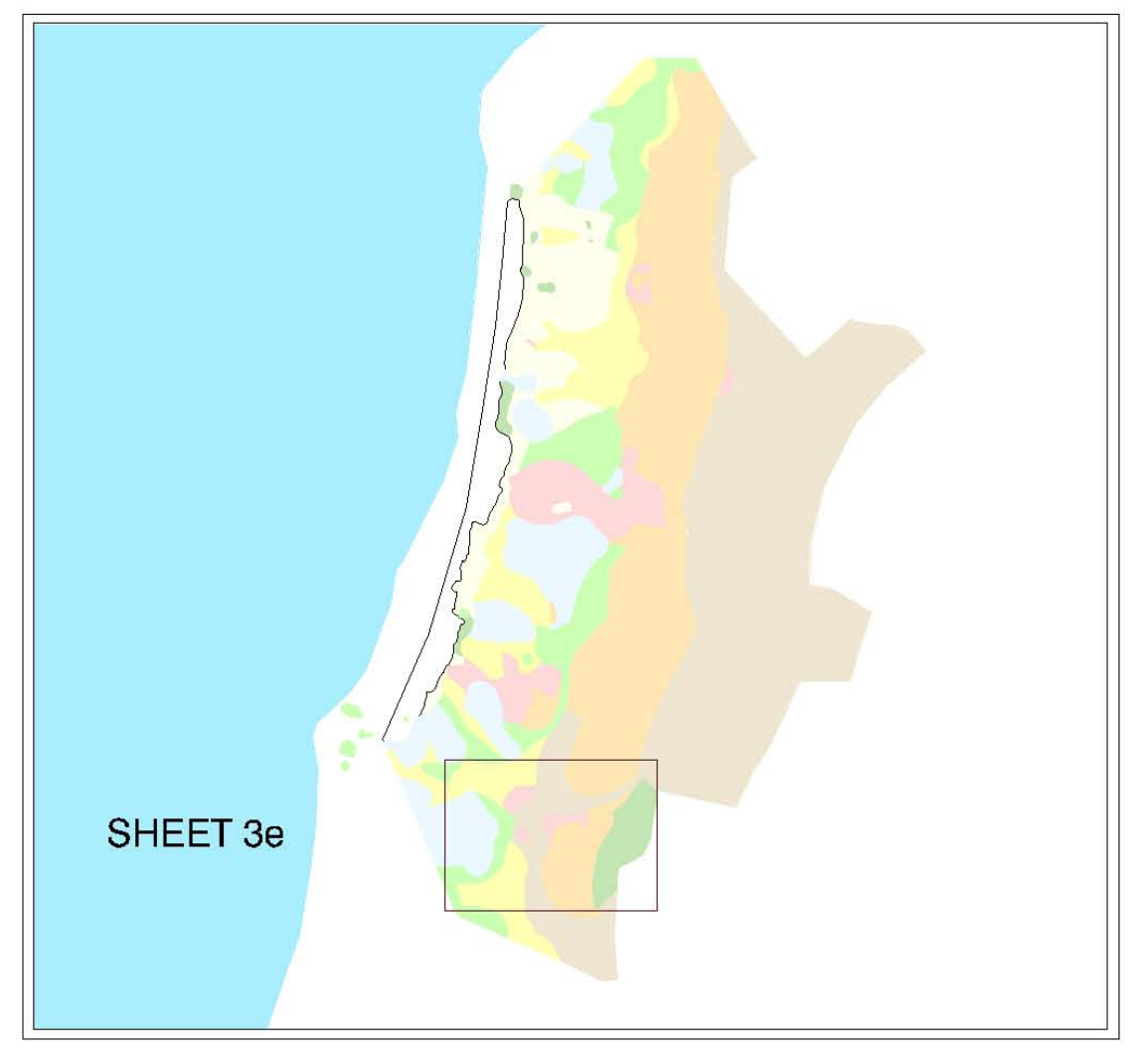
Results shown in **BOLD BLACK** type face exceed applicable screening levels
Previous sample results shown in black; 2006 data are shown in green.
Results are shown for only those analytes exceeding screening levels in samples collected from the BBDAs or MRFS

Notes:

1. All previous boring locations are approximate.
2. Basemap was provided by Presidio Trust.
3. "X" = Indicates the chemical exceeds screening level at this location.
4. ft bgs = feet below ground surface
5. PCOC = Potential Chemical of Concern
6. NA = Not Analyzed
7. "J+" = Estimated High Bias
8. "J-" = Estimated Low Bias
9. "U" = Qualified as No-Detection
10. "J" = Estimated Value
11. ND(0.0078) = not detected at reporting limit indicated in parentheses
12. "RES, ECO-SS" = Residential Human Health and Ecological Special Status Species Cleanup Levels
13. "RES, ECO-Buffer" = Residential Human Health and Ecological Buffer Zone Cleanup Levels
14. PAHs = Polynuclear aromatic hydrocarbons
15. Posted data shown in green type face are preliminary and have not undergone Level III data validation
16. BBDA = Baker Beach Disturbed Area
17. MRFS = Merchant Road Fill Site
18. "b" = High response observed for analyte in initial or continuing calibration verification; analyte was not detected at or above the reporting limit in the associated sample.
19. Qualifiers for posted data shown in black type face (pre-December 2006) are listed as lab qualifier/validation qualifier.

N

0 20 40
APPROXIMATE SCALE IN FEET



THE PRESIDIO TRUST

PCOCs in Soil Baker Beach Disturbed Areas Frontal Slope and Bluff Top Areas

CHECKED
APPROVED
DATE

FIGURE 3e

PROJECT NUMBER 57255 005115